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ABSTRACT

The general objective of this study is to assist in the improvement of compensatory education programs in Massachusetts through modifications of current programs based on evaluations specific enough to permit the formulation of concrete recommendations for improvement. A 10 percent sample of projects was chosen for study as theoretically representative of the total Statewide Title I program. Each project was visited an average of between two and three times by a trained observer. Additionally, a survey was taken of all school district superintendents in April 1969. The findings of the study point to four characteristics of compensatory education as presently conceived and practiced in Massachusetts, which keep it from efficiently producing significant results of a permanent nature: (1) Lack of explicit objectives, operationally defined, which deal with the basic problems of the disadvantaged child; (2) Lack of sound designs for evaluating programs; (3) Lack of model compensatory education programs, which demonstrate appropriate curricula and effective teaching methods; and, (4) A critical shortage of well-trained compensatory education manpower. (Author/JM)

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COMPENSATORY EDUCATION IN MASSACHUSETTS:

AN EVALUATION WITH RECOMMENDATIONS

Submitted to
The Massachusetts Advisory Council on Education

by

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March 1970

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The cooperation and encouragement the study received from educators in a wide variety of government, school, and university positions were indicative of the sincere interest and dedication to the cause of improving educational opportunities for disadvantaged students and the quality of education generally. We are grateful to the Massachusetts Advisory Council on Education, its staff, the Advisory Committee to the study appointed by the Council, and for the continual assistance of Dr. Lawrence Fox and Dr. William Gaige in particular. The State Department Title I Office under the leadership of Mr. Robert Jeffery, was at all times most cooperative and patient with us in answering our many questions, requests for materials, and demands on their time. Miss Janice Meissner, consultant to the State Department Title I Office, assisted us in the preparation of the final report. Dr. Fred Wilkinson willingly gave of his time to acquaint our staff with his Title I research experience and to consult with us on sampling problems. Mr. Charles Hammer of the U. S. Office of Education attended our two training conferences and added to the comprehensiveness of our outlook. Dr. Marvin Cline, acting as our non-resident consultant, was more than generous with his time in assisting us and in working with staff members of projects in the sample.

We are particularly grateful to the many Title I project staff members and their associates throughout the State who welcomed us to their projects and joined with us in what we hope will be a valuable experience for everyone.

Further, we wish to express our gratitude to the University of Massachusetts in general and to the School of Education in particular for their support and assistance in carrying out the objectives of the study in ways too numerous to mention.

FOREWORD

Evaluating programs of assistance for poor people is relatively simple. With the delivery of food, clothing, and medical care, the results are observable. Plans can be made to continue the assistance and to establish the program on a permanent basis.

To develop programs for the educationally impoverished is far more difficult, and evaluation is even more difficult. The record of compensatory education programs is unclear; little evidence is available to establish their value. Aid must be given, and the results must be evaluated. These are the main problems of all who support or participate in compensatory education.

In 1969 the Commonwealth received about $16,000,000 in federal support for education of the culturally deprived from Title I of the ESEA. The expenditure of these funds to alleviate educational disadvantage is an important activity. It is clear that educators at both the local and state levels need assistance in developing their programs and in evaluating them. For this reason the Advisory Council engaged Dr. Daniel Jordan, Professor of Education at the University of Massachusetts, Amherst, to direct a study of Title I and other locally supported programs in the Commonwealth which would describe their extent, educational soundness, and recommend the way toward validity and improvement through a system of evaluation procedures. Dr. Jordan's study staff has involved teachers, counselors, psychologists, social workers, officials in the State Department of Education and consultants from the universities. The resulting recommendations are clear, feasible, and they must be implemented.

On behalf of the members of the Advisory Council on Education and the legislators who created it, I present this extensive and needed report to the people, the teachers and to the professionals involved in combating educational inequality. We urge the Board of Education, the teacher preparing colleges--all engaged in the business of overcoming educational disadvantage to use the report as a guide and an impulse toward more extensive programs.

William C. Gaige
Director of Research

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HOW TO USE THIS REPORT

This report has been compiled to serve a variety of purposes for different people:

For those wishing a presentation of the essence of the document in brief form, see "Four Critical Courses of Action," (Pink Stock) pages 4-18.

For those wanting a complete summary of the entire document as a basis for planning change, see "Blueprint for Action," (Yellow and Pink Stock) pages 1-121.

For those wishing to use it as a detailed reference manual for planning individual projects, the section, "Analysis of Data and Recommendations," pages 130-262, and materials listed in the Bibliography, page 365, will be useful. Sections on needs assessment, establishing objectives, and evaluation are particularly relevant.

For those planning in-service and pre-service training programs, the section, "Model Programs for Training Compensatory Education Personnel," pages 55-100, may prove useful.

For those particularly interested in evaluation, Part I of the section, "Analysis of Data and Recommendations," pages 130-205, and the material listed in the Bibliography relative to evaluation, page 365, are pertinent.

Finally, the entire document contains suitable material for use in pre-service and in-service training programs for compensatory education personnel. The wide margin on each page can be used for making notes and recording comments.

PREFACE

The past decade has seen an increased awareness of the existence of poverty in the United States, and, accompanying this awareness, a greater public concern for understanding and changing the social and economic forces that serve to capture and perpetuate it generation after generation. This decade has also seen the beginnings of new social and political action aimed at attacking the causes and the adverse effects of poverty. One of the primary targets has been in the area of education.

Traditionally, and somewhat optimistically, education has been regarded as the major means of obtaining social mobility, security, and success in the society. But the schools--and the public schools in particular--reflect normative values and aspirations and therefore gear their curricula to those students who are in the middle class majority. For the growing minority, the children of the poor in particular, the schools have been generally ineffective and extraneous. These children come into the schools from subcultures that are markedly different from the mainstream. They frequently have neither the verbal and cognitive skills nor the expectations and motivations that are prerequisite to academic success. The schools have been ill-prepared to deal constructively with these children and have, therefore, in effect, dismissed them.

"Compensatory Education" is a relatively new concept. It focuses attention upon the various factors that can inhibit learning and seeks to "compensate" for the demoralizing and isolating effects of economic and social deprivation upon children and their families. Its purpose is to provide children from atypical and impoverished homes with the kinds of educational experiences that will enable them to function and compete successfully in the larger society.

Much of the recent impetus to the development of compensatory education has been provided by Title I of the Elementary and Secondary Education Act of 1965 (P.L. 89-10).[1] Although later amendments have extended the original scope of the Title I program to include children of migratory workers, handicapped children, and neglected and delinquent children, the principal emphasis of the legislation is upon extending educational opportunities through local school districts to children living in low-income areas. The stated purpose of the program is "to provide financial assistance to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means (including pre-school programs)

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[1] The correct legal reference is actually Title II, Public Law 81-874 as amended by Public Law 89-10, Title I.

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which contribute particularly to meeting the special educational needs of educationally deprived children." (Sec. 201)

Financially and in terms of participation, Title I is the largest federal program to assist education. Each year it has been providing approximately one billion dollars nationally and serving nearly one million children. Collectively, Massachusetts school districts receive over $15 million and provide Title I activities for about 100,000 children annually. Currently, Title I allocations are determined for each state (and in turn for each local educational agency within a state) on the basis of (a) the number of children aged five through seventeen from families with incomes under $2,000 according to the 1960 census and (b) the number of children aged five through seventeen from families with incomes over $2,000 because of Aid to Families with Dependent Children (AFDC), under Title IV of the Social Security Act. The total number of such children within a given state is then multiplied by one-half the state or national average per pupil expenditure, whichever is larger. The $2,000 poverty index was increased to $3,000 by an amendment (P.L. 89-750) to the original legislation, but a subsequent amendment (P.L. 90-247) then reversed this increase by stating that the $3,000 figure was not to be used until Title I appropriations were large enough to provide maximum grants to all eligible agencies on the basis of the $2,000 index. Since each year appropriations have remained lower than the maximum authorizations permitted by the law, the $2,000 figure is still used in the allocation formula.

The state education agencies are responsible for the administration of the program within the states. Entitlements for each school district are calculated according to the above formula. School district personnel must prepare project proposals annually to apply for part or all of their entitlements; these proposals are reviewed and approved by staff in the state education agencies. Regulations regarding the geographic locations in which school districts may spend their Title I funds and the inclusion of children attending non-public schools are designed to insure that the funds do reach areas where there is the greatest concentration of low-income families within each eligible community.

Evaluation is a central concern of the Title I program and has been since its inception. The legislation contains specific provisions for evaluations at the local, state, and national levels. Section 205 (5) of the Act stipulates that "effective procedures including provisions for appropriate objective measurements of educational achievement will be adopted for evaluating at least annually the effectiveness of the programs in meeting the special educational needs of educationally deprived children." The legislation also requires local school districts to submit the results of their project evaluations to the state education agency. In turn, state education agencies are to report annually to the U. S. Office of

Education, providing information relative to state-wide operation of the Title I program. The U. S. Office of Education is then required to submit its findings regarding the national impact of Title I to the Congress and the President. The legislation further established the National Advisory Council on the Education of Disadvantaged Youth, a group that functions outside of the Office of Education to conduct an independent program evaluation which it presents each year directly to the Congress.

In the Spring of 1968, the U. S. Office of Education initiated an additional means of gathering evaluative data on a national level that would be more specific and more comparable than what can be obtained through the fifty state reports. The National Survey of Compensatory Education includes 465 school districts selected as a representative national sample. Thirteen Massachusetts school districts are included. Detailed questionnaires are administered to principals, central office personnel, and teachers of grades 2, 4, and 6 in certain schools within the sample. Individual pupil information including test scores is also gathered for a sample of children within these grades. From this effort the U. S. Office of Education hopes to develop a nation-wide picture of compensatory services, the student populations receiving such services, and their influence upon achievement levels.

Since the beginning of the program in 1965, numerous other public and private organizations have been examining Title I programs and assessment procedures. Some are working independently; others are working under contract from the states and the U. S. Office of Education. Several of these studies have involved Massachusetts school districts or been conducted by organizations within the state. Abt Associates in Cambridge, Massachusetts, designed a study for the U. S. Office of Education in which they investigated the feasibility of applying cost-effectiveness analysis to the evaluation of Title I projects. Boston College reported on its federally-funded study of the participation of non-public school children in Title I programs, and the Reading Studies Center of Western Reserve University has provided the U. S. Office of Education with a report on Title I reading projects throughout the country. These latter two studies included some Massachusetts projects in their samples. The USOE also contracted with the New England School Development Council (NEEDS-NESDEC) to examine the operation of Title I in New England. This study developed a statistical description of FY66 Title I activity in the region and provided findings and recommendations concerning the feasibility of programmatic evaluation and the availability of suitable data.

Background of the MACE Study: In 1962, the Massachusetts General Court empowered a 21 member committee to conduct a comprehensive study of educational practices, policies, and laws within the state. The Special Commission Relative to Improving and Extending Educational Facilities in the Commonwealth is informally called the Willis-Harrington Commission after its Executive Director, Benjamin C. Willis and its Chairman, Senator Kevin B. Harrington. The group presented its findings in December, 1964. The study[1] produced some interesting statistics regarding the extent of poverty within Massachusetts. As of the 1960 census, all but three communities in the state had families with incomes under $3,000 (p. 287). Between 25% and 30% of the total student population was considered to be in need of compensatory education services, including services for the handicapped (p. 288). The Commission studied the need for extending compensatory education activities and, prior to the existence of the Elementary and Secondary Education Act, offered a series of recommendations to the Department of Education and to local school districts regarding ways in which they might improve the quality and quantity of programs for the disadvantaged child.

As the Willis-Harrington Commission was completing its broad study of Massachusetts education and partially because of the findings and recommendations that the Commission was developing, the Massachusetts General Court authorized a state program to provide funds to public school districts for the support of compensatory education activities for disadvantaged children. Chapter 650 of the Acts of 1964 was approved in July of 1964 and became effective the following September. The legislation provided state funds for reimbursement on a matching basis to school districts that developed compensatory education projects approved by the Massachusetts Department of Education. The total program was small, awkwardly designed, and short-lived. After June, 1967, it was not renewed. During its first year, fiscal year 1965, the legislature approved only $50,000 for the program; during its last year, that amount was increased to only $100,000. Thus, limited funding meant that few communities were able to participate and none could receive more than a few thousand dollars. The provision that state matching fund reimbursements could be made only after local projects had been completed meant that the total operating costs of the approved projects had to be encumbered initially in the local budgets. This arrangement did not work to the advantage of participating school districts. Instead, it added administrative difficulties in exchange for meagre financial assistance. By this time, too, Title I of the Elementary and Secondary Education Act was providing much larger grants to fully fund local projects. As a result, in 1967, rather than revise and strengthen Chapter 650, the legislature discontinued state support of compensatory education.

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[1] Quality Education for Massachusetts: An Investment in the People of the Commonwealth, Final Report of the Massachusetts House Special Commission Established to Make an Investigation and Study Relative to Improving and Extending Educational Facilities in the Commonwealth; Hon. Kevin B. Harrington, Chairman; Benjamin C. Willis, Executive Director; June, 1965.

Indirectly, this present study came into being as a result of the Willis-Harrington Commission. Among its many other recommendations, the Commission also urged and the State Legislature subsequently established the Massachusetts Advisory Council on Education. MACE exists independently from the Department of Education and is responsible directly to the General Court. It serves to initiate and sponsor studies in areas that it considers particularly critical to Massachusetts education and to provide recommendations for future state and local action in these areas.

In the Fall of 1968, MACE contracted with the School of Education at the University of Massachusetts for a one-year investigation of compensatory education programs in Massachusetts. This document is the final report based on that investigation.

The first section, "Blueprint for Action," contains a concise summary of findings followed by recommendations and suggestions for implementing them. It is available in a separate publication for the convenience of those who want a digest of the report with a practical orientation.

BLUEPRINT FOR ACTION

A SUMMARY OF RECOMMENDATIONS FOR IMPROVING COMPENSATORY EDUCATION IN MASSACHUSETTS

This section functions as a summary of the report on Compensatory Education in Massachusetts and is published as a separate document for those who have no need for the detailed information of the complete report.

For the busy reader who wants to have a quick grasp of the essentials of the full report and yet does not want to read the summary in its entirety, the subsection entitled "Four Critical Courses of Action: What Can Be Done to Strengthen Compensatory Education in Massachusetts," pages 4 - 18 (pink stock) contains all of the high priority recommendations and serves as a digest of the summary.

BLUEPRINT FOR ACTION:
A SUMMARY OF RECOMMENDATIONS
FOR IMPROVING COMPENSATORY EDUCATION IN MASSACHUSETTS

INTRODUCTION

Over 135,000 school children in the State of Massachusetts have backgrounds which did not prepare them for successful performance in traditional school systems. Thousands of similar children not yet in school will continue to enter school at some future time unprepared and therefore disadvantaged. To guarantee these children an equal educational opportunity means that they must be provided with special learning experiences that will enable them to compensate for disadvantages created by inadequate preparation.

For all practical purposes, compensatory education in the State is financed by Title I (Elementary and Secondary Education Act of 1965) funds. In fiscal year 1968, the State received over $16 million in Title I funds to finance 466 compensatory education projects involving over 100,000 students in 305 school districts. A comparable amount was received for fiscal year 1969. Our study dealt with practically every aspect of a ten percent random sample of these projects. Based on the findings of the study, forty-eight recommendations for improving compensatory education in the Commonwealth have been formulated. Those recommendations which have been assigned the highest priority define four basic courses of action that must be taken if the pressing needs of the State's disadvantaged children are to be met.

FOUR CRITICAL COURSES OF ACTION:

WHAT CAN BE DONE TO STRENGTHEN COMPENSATORY EDUCATION IN MASSACHUSETTS

The findings of our study are consistent with the findings of a large number of similar studies on compensatory education and on Title I programs in particular. On the one hand, our findings indicate an impressive accumulation of experience in working with disadvantaged children on the part of hard-working and devoted teachers, aides, and administrators and, on the other hand, a growing disillusionment and frustration, frequently not readily admitted, with compensatory education as currently conceived and practiced. The reason for the frustration is clear: this kind of education is not producing significant results of lasting value in sufficient numbers of students fast enough to deal with a problem that has already reached vast proportions and is still growing at an alarming rate.[1]**

Our findings point to four basic characteristics of compensatory education as presently conceived and practiced in Massachusetts which keep it from efficiently producing significant results of a permanent nature:

(1) Lack of explicit objectives, operationally defined, which deal with the basic problems of the disadvantaged child;

(2) Lack of sound designs for evaluating programs so that they can be continually improved;

(3) Lack of model compensatory education programs which demonstrate appropriate curricula and effective teaching methods; and,

(4) A critical shortage of well-trained compensatory education manpower.

All of our recommendations support four basic courses of action which are pertinent to these weaknesses and which we believe will, if fully implemented, dramatically strengthen the programs in compensatory education and make them effective. They are:

(1) Establish appropriate program objectives, operationally defined, and center all planning on these objectives;

** Footnotes are numbered consecutively and are contained in the section on "Notes and References" beginning on page 101.

(2) Establish sound evaluation components in all Title I projects for use in systematic modification towards program improvement;

(3) Establish several model compensatory education programs which may be adopted with appropriate modification in other localities; and,

(4) Take steps to fill the compensatory education manpower shortage by setting up training programs consistent with the above three courses of action.

I. ESTABLISH APPROPRIATE PROGRAM OBJECTIVES

During the first four or five years of their lives, most middle-class children go through a "hidden" curriculum which provides for them the kinds of basic learning competencies that are prerequisite to successful performance in school.[2] Up to the present time, schools have based their curricula, their teaching methodology, and their grading and incentive systems upon the erroneous assumption that everyone coming into the school has had exposure to that "hidden" curriculum and mastered it reasonably well. A child growing up in poverty or semi-poverty will also be exposed to a "curriculum"--one that enables him to survive in his culture, to be sure, but also one that does not provide him with the kinds of learning competencies prerequisite for successful performance in schools as they are currently set up.

In coming to the school situation, he is clearly at a tremendous disadvantage when compared to his more affluent peers. The school then compounds the disadvantage by giving him learning tasks the prerequisites to which he has not yet mastered, thereby setting him up for a guaranteed failure. Being stuck in such an intolerable and unjust position and being forced to accumulate failures over long periods of time generate such negative emotional by-products, all associated with the formal learning situation, that effective learning within the formal context becomes impossible. Since failure in school reduces opportunities for attaining future economic security and continuing growth and development, both socially and personally, the magnitude of this problem approaches incomprehensible dimensions. Its ramifications are far-flung largely because the situation perpetuates itself through a cycle that is difficult to interrupt.

There are approximately 15 million children in the United States who find themselves locked in a system that is not helping, but in many cases making things worse. Compensatory education has come to be regarded as one of the most promising means of helping these children. This kind of education is intended to "compensate" for the missed "hidden" curriculum. Unfortunately, there is a widespread tendency to cast compensatory education into a remedial mold or put it in the form of general enrichment activity, neither of which can compensate for inadequate preparation for school. Both remedial work and enrichment experiences have their place, but if they do not focus on the task of developing competent learners, they are apt to have very little permanent or even short-term effects.[3,4] Our data indicate that Title I programs in Massachusetts are similar to the variety of compensatory education programs prevalent throughout the United States--programs which do not focus on developing competent learners and which are therefore not being maximally effective.[5] We therefore hope that the following recommendation will be regarded as urgent and critical:

> (34)** THAT THE STATE DEPARTMENT TITLE I OFFICE MAKE THE DEVELOPMENT OF EFFECTIVE AND COMPETENT LEARNERS THE REQUIRED MAIN OBJECTIVE OF ALL TITLE I PROGRAMS AND THAT LOCAL PROJECTS BE GIVEN ASSISTANCE IN TRANSLATING THIS MAIN OBJECTIVE INTO SPECIFIC BEHAVIORAL OBJECTIVES RELEVANT TO THEIR OWN PROGRAMS.

(The characteristics of a competent learner are outlined on pages 56-59 of this document.)

** In the main body of the study, recommendations are numbered consecutively, but not in order of priority. These same numbers are used to identify the recommendations in this summary so that they may be easily referred to in the context of the findings presented in greater detail in the section on "Analysis of Data and Recommendations," beginning on page 130 of the full report.)

In education everywhere there is evidence of a distinction between what educators say they propose to do and what they find themselves doing. In compensatory education this is particularly true (largely because we have a better notion of what we want to achieve than how to achieve it). This is not a matter of willful deception, but a problem of inadequate attention to the evaluation process as it relates to objectives and priorities within objectives.

Stake and Denny have expressed it succinctly:

> Not only must the evaluator report the goals but he must indicate the relative importance of the goals. Goals are not equally desirable; some have priority over others. Different educators will set different priorities, and the same educator will change his priorities over time. Priorities are complex and elusive, but the evaluation responsibility includes the job of representing them. New conceptualizations and new scaling techniques are needed to take a first step toward discharging this responsibility.
>
> The great weakness in our present representation of goals is that it does not guide the allocation of resources. Goals compete for our support, for our efforts. Relying on some explicit or implicit priority system, those who administer education decide among alternative investments, operational expenditures, and insurances. Evaluation requires an acknowledgement of priorities.[6]

Not only do the priorities need to be clear, but the objectives need to be explicit and operational. Otherwise, they cannot be communicated, will be useless as a guide, and can easily be changed without being noticed.[7,8,9] Our findings clearly indicate the need to implement the following recommendation within the context of the preceding one:

(8) THAT THE STATE DEPARTMENT TITLE I OFFICE PUBLISH GUIDELINES ON FORMULATION OF PROGRAM OBJECTIVES WHICH WILL INCLUDE AN ELABORATION ON THE FOLLOWING SUGGESTIONS:

  A. OBJECTIVES SHOULD BE GENERATED OUT OF ASSESSED NEEDS AND BE FEASIBLE IN TERMS OF RESOURCES AVAILABLE

  B. OBJECTIVES SHOULD REFLECT A HIERARCHY OF PRIORITIES SO THAT RESOURCES, TIME, AND PERSONNEL CAN BE ALLOTTED ACCORDINGLY

  C. PROGRAM OBJECTIVES SHOULD BE CLEARLY STATED IN BEHAVIORAL TERMS THAT ESTABLISH PERFORMANCE CRITERIA FOR STUDENTS AND SPECIFIC SUCCESS CRITERIA FOR THE PROGRAM

  D. PROGRAM OBJECTIVES SHOULD BE DISSEMINATED TO ALL STAFF MEMBERS AND BE INCLUDED AS A PART OF THEIR PRE-SERVICE AND IN-SERVICE TRAINING SO THAT EVERYONE KNOWS HOW HE IS RELATED TO THE ACHIEVEMENT OF THE OBJECTIVES

In connection with "C" above, it is important to bear in mind at least two basic criteria for program success:

(1) That students achieve at a rate *above* the norm, and
(2) That students receiving compensatory education exhibit achievement levels statistically significantly higher than a comparable control group which does not have the compensatory treatment.

Anything less than this will be an indication of program ineffectiveness.[10, 131]

II. ESTABLISH SOUND EVALUATION COMPONENTS IN ALL TITLE I PROJECTS

Once objectives have been specified and the program planned around them, there is no way of determining whether or not, or to what degree they were achieved without a carefully planned evaluation component. It is clear that good evaluation is the *sine qua non* of program improvement. There is little hope of insuring good evaluation unless adequate time and resources are allocated for this purpose. Above all, qualified personnel are required. Given the scarcity of trained evaluators, it is all the more important for this kind of expertise to be present in the Title I

Office.[11] Although the State report for 1968[12] indicates a growing sophistication in evaluation (and we have seen some evidence for this), our data nonetheless clearly indicate a great need for improvement of the evaluation procedures employed by project directors. We therefore recommend:

(11) THAT THE TITLE I STATE DEPARTMENT OFFICE RETAIN TWO OR MORE FULL-TIME PROFESSIONALLY QUALIFIED PROGRAM EVALUATORS WHO CAN BE ASSIGNED THE RESPONSIBILITY FOR REVIEWING THIS ASPECT OF ALL PROPOSALS, MONITORING THE EVALUATION PROCESS OF THE PROGRAMS, AND FOR HELPING TO MOBILIZE EVALUATION RESOURCES TO ASSIST LOCAL DISTRICTS AS NEEDED.

It is important to note here that one percent of the State allocation for Title I can be used by the State for administration of programs. In Massachusetts this amounted to $167,965 in fiscal year 1968-69. During last year, only $77,663 was used, the rest being returned to the federal government. Thus, this recommendation is not unrealistic from a financial point of view.

Since State agencies are frequently not able to compete for adequately trained staff, particularly in the area of evaluation, we suggest:

(12) THAT THE TITLE I STATE DEPARTMENT OFFICE ESTABLISH CONTRACTUAL AGREEMENTS WITH BUSINESS OR INSTITUTIONS OF HIGHER LEARNING TO PROVIDE TRAINING AND/OR CONSULTANT SERVICES TO EVALUATION STAFF MEMBERS ON THE LOCAL LEVEL OR ENCOURAGE LOCAL DISTRICTS TO DO SO.[13]

(13) THAT SPECIFIC ENCOURAGEMENT BE GIVEN TO LOCAL EDUCATIONAL AGENCIES TO APPOINT PAID EVALUATORS TO TITLE I PROGRAM STAFFS AND THAT IT BE MANDATORY THAT THESE EVALUATORS BE INCLUDED ON THE PLANNING STAFF.

(14) THAT THE STATE DEPARTMENT OF EDUCATION ORGANIZE A POOL OF UNIVERSITY CONSULTANTS WHO CAN BE DRAWN UPON BY LOCAL DISTRICTS FOR ASSISTANCE IN PLANNING, IMPLEMENTING, AND EVALUATING THEIR PROJECTS.

It should be noted here that the Massachusetts Advisory Council on Education and the Title I Office in the State Department have already acted on recommendation 14. Consultants from various institutions of higher learning have been identified and already brought together for a discussion of their responsibilities. Lists of these consultants and their addresses have been made available to all Title I programs.

(15) THAT PART OF THE FUNDS FOR TITLE I PROGRAMS SHOULD BE MADE AVAILABLE TO PROVIDE RELEASE TIME FOR POTENTIAL TITLE I STAFF MEMBERS FOR PLANNING, EVALUATION, PRE-SERVICE, AND IN-SERVICE TRAINING. GUIDELINES SHOULD SPECIFY THIS AND SUGGEST VARIOUS KINDS OF ARRANGEMENTS FOR DOING IT.

With the possibility of adequate assistance being offered, it becomes reasonable to establish the requirement embodied in the recommendation:

(16) THAT SOUND EVALUATION DESIGNS BE CONSIDERED A REQUIRED PART OF THE PROPOSAL FOR FUNDS AND THAT NO PROJECT BE FUNDED IF IT DOES NOT HAVE AN ACCEPTABLE EVALUATION DESIGN.

It is a common practice for administrators to require reports of various kinds which are seldom read and rarely used. Evaluation reports are no exception and our data show that for the most part the basic purposes of evaluation reports (modification towards improvement[14]) are frustrated by:

(a) The design of the report forms;
(b) The medium of the report;
(c) The pattern of dissemination; and,
(d) The timing and frequency of dissemination.

Rather than being a vehicle for change, evaluation reports are frequently viewed as an official opportunity to justify what has been done by presenting the program in the most positive light possible. This attitude always has an effect on dissemination patterns and reduces the utility of reports considerably. We believe the following recommendations are essential to the realization of the purposes of evaluation:

(20) THAT THE STATE DEPARTMENT TITLE I OFFICE CREATE AND ADOPT A NEW EVALUATION REPORTING SYSTEM, GIVING ATTENTION TO THE USE OF NEW REPORT FORMS, DIFFERENT MEDIA FOR DIFFERENT AUDIENCES,[15] PATTERNS OF DISSEMINATION,[16] AND FREQUENCY AND TIMING OF DISSEMINATION,[17] ALL GEARED TO FACILITATE PROGRAM MODIFICATION FOR IMPROVEMENT. SPECIFICALLY, EVALUATION REPORTS COMING AT THE END OF A PROJECT SHOULD BE REQUIRED TO INCLUDE CONCRETE RECOMMENDATIONS FOR PROGRAM MODIFICATION, OR PRESENT EVIDENCE AS TO WHY THE PROGRAM SHOULD NOT BE MODIFIED WHEN REPEATED.

(21) THAT EVALUATION RESULTS OF A PREVIOUS YEAR'S PROGRAM BE MADE A MANDATORY SOURCE OF INPUT FOR THE CURRENT YEAR'S PLANNING. PROPOSALS SHOULD THEREFORE REQUIRE SOME KIND OF EVIDENCE CONFIRMING COMPLIANCE.

III. ESTABLISH SEVERAL MODEL COMPENSATORY EDUCATION PROGRAMS

Given the magnitude of the educational problems facing disadvantaged youngsters and the fact that deficits accumulate rapidly with passing time, it is imperative for methods of compensatory education that are highly successful to be identified[18] as soon as possible and then be put into operation as models. By providing adequate rewards and incentives,[19] these models will be adopted in localities where evaluation demonstrates that little success is being achieved. Identifying such approaches may require a greater investment of resources initially but will pay off in the long run. We therefore recommend:

(42) THAT THE STATE DEPARTMENT TITLE I OFFICE COLLABORATE WITH THE BOARD OF HIGHER EDUCATION, SELECTED INSTITUTIONS OF HIGHER LEARNING AND PROMISING SCHOOL DISTRICTS IN THE DEVELOPMENT OF SEVERAL CAREFULLY DESIGNED COMPENSATORY EDUCATION MODELS WHICH CAN BE RIGOROUSLY EVALUATED AND RESULTS FROM WHICH CAN BE DISSEMINATED TO OTHER PROJECTS. SUCH MODELS SHOULD BECOME DEMONSTRATION CENTERS WHERE STUDENT TEACHERS MAY BE TRAINED AND WHERE SITE VISITS MAY BE MADE BY THOSE WORKING IN COMPENSATORY EDUCATION.

In the above recommendation we are referring to the kind of evaluation specified by Edward Suchman:

> The key conceptual elements in a definition of evaluation from a methodological point of view are (1) a planned program of deliberate intervention, not just any natural or 'accidental' event; (2) an objective or goal which is considered desirable or has some positive value, not simply whatever change occurs; and (3) a method for determining the degree to which the planned program achieves the desired objective. Evaluation research asks about the kind of change desired, the means by which this change is to be brought about, and the signs according to which such change can be recognized.[20]

The specifications of a suggested model program are presented in the section "Model Program for Training Compensatory Education Personnel," beginning on page 55.

IV. TAKE STEPS TO FILL THE COMPENSATORY EDUCATION MANPOWER SHORTAGE

According to a 1967 Yeshiva University report to the Civil Rights Commission, only 3% of the 15,000 teachers graduating in 1966 from the ten major institutions that certify public school teachers in the United States had received any orientation in teaching disadvantaged children.[21] Yet, it is estimated that 20-30% of the children in the nation's schools require compensatory education.

This general lack of preparation for teaching the disadvantaged is reflected in our data from the sample. We therefore recommend:

(43) THAT IN ORDER TO MEET A CRITICAL MANPOWER SHORTAGE IN COMPENSATORY EDUCATION, THE STATE DEPARTMENT OF EDUCATION, IN COLLABORATION WITH SELECTED INSTITUTIONS OF HIGHER LEARNING AND PUBLIC SCHOOL SYSTEMS, GIVE TOP PRIORITY TO THE ESTABLISHMENT OF MODEL PROGRAMS, BOTH PRE-SERVICE AND IN-SERVICE, FOR TRAINING A VARIETY OF COMPENSATORY EDUCATION PERSONNEL; THAT THESE PROGRAMS BE BASED ON UP-TO-DATE RESEARCH FINDINGS CONCERNING LEARNING AND THE KINDS OF EXPERIENCES THAT ARE PREREQUISITE TO THE DEVELOPMENT OF COMPETENT LEARNERS, PARTICULARLY AS THESE EXPERIENCES RELATE TO THE DISADVANTAGED; THAT THEY INCLUDE MODEL COMPONENTS ON EVALUATION AND CURRICULUM; THAT THE PROGRAMS BE SELECTIVE IN WHOM THEY ADMIT AND RIGOROUS IN EXTENT AND DEPTH OF TRAINING; AND, THAT THEY BE CAREFULLY EVALUATED.

Please see the section "A Model Program for Training Compensatory Education Personnel," page 55, for specifications of a suggested model.

SUMMARY OF STUDY FINDINGS AND SUBSIDIARY RECOMMENDATIONS

This section contains brief summaries of some of the basic findings and all subsidiary recommendations. They are presented under headings consistent with the observation protocol and questionnaire used to collect the data and represent elaborations on the high priority recommendations of the previous section.

The findings are summarized in brief form and therefore are usually general rather than specific in nature. Furthermore, rather than stressing strong points, they have been phrased in a way that highlights the weaknesses to which the subsequent recommendations pertain. This should not be construed to mean that there were no programs with strong features. There were several programs that had innovative and imaginative approaches and most had a dedicated staff. Some projects are already doing some of the things we are recommending. We acknowledge the excellence of these projects or aspects of them and know that members of their staffs will appreciate the reason for our approach.

PART I: PROJECT PLANNING, EVALUATION, AND MODIFICATION

PLANNING PROCEDURES

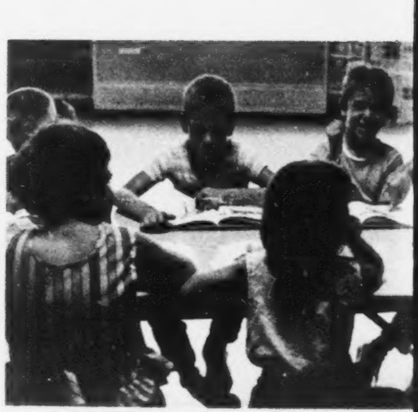
SUMMARY OF FINDINGS FROM SAMPLE OF TITLE I PROJECTS

Participants in Planning Process

- *Planning is done largely by administrative personnel*
- *Less than 1/5 of the planning staff for Title I programs were teachers*
- *81% of projects received no university assistance*
- *Community organizations rarely involved significantly in planning process*
- *Students seldom participated in planning*
- *Parents never mentioned as participants in planning*

Needs Assessment

- *No systematic review of needs*
- *Little attention was given to establishing priorities among needs*
- *Three highest ranking needs identified were:*



1. *Reading improvement*
2. *Improvement of self-image*
3. *Improvement of attitude toward school*

Planning Time

- *Most felt there to be inadequate lead time for planning*
- *Congressional appropriation schedules do not coincide with school year cycle and hampers sound planning and project implementation*

Program Repetition

- *9 out of 33 projects were repeated with no revisions*
- *Most revisions concerned matters related to personnel*
- *6 of 33 projects indicated they had used the previous year's evaluation in making revisions*

Planning of Pre-service and In-service Training of Staff

- *Little evidence of careful planning for staff training*
- *When planning did occur, it often did not have a focus congruent with objectives*

RECOMMENDATIONS

There are several partners which must join hands in providing effective compensatory educational services for disadvantaged youngsters: the youngsters themselves and their parents; school personnel; and, representatives of the community and its agencies and institutions. The more involved all members of the partnership are in the conception of programs, the better the programs are likely to be, not only because there will be many useful perspectives on needs and objectives forthcoming from a team effort, but also because participation in the creation of something tends to inspire commitment and support for it.[22] We therefore recommend:

(1) THAT LOCAL SCHOOL DISTRICTS BE ENCOURAGED THROUGH WHATEVER APPROPRIATE MEANS TO DEVELOP MORE BALANCED PLANNING COMMITTEES WHICH WILL INCLUDE TEACHERS, SPECIALISTS, PARENTS, COMMUNITY REPRESENTATIVES, STUDENTS, AND EVALUATORS (BOTH LOCAL AND FROM THE STATE DEPARTMENT).

However, such team effort takes more time and, as our data show, this is often not available because of unrealistic deadlines for submitting proposals and lack of release time from other responsibilities on the part of school personnel.[23,24] We recommend:

(2) THAT THE STATE DEPARTMENT OF EDUCATION, TITLE I OFFICE, STUDY THE PACING OF EVENTS STARTING FROM THE INITIAL PLANNING TO THE BEGINNING OF THE PROJECT AND THAT ON THE BASIS OF THAT STUDY NEW DEADLINES BE ESTABLISHED FOR (a)

SUBMISSION OF PROPOSALS OR PROSPECTUSES AND (b) REVIEW AND APPROVAL/DISAPPROVAL OF PROPOSALS SO THAT ADEQUATE LEAD-TIME CAN BE MADE AVAILABLE FOR:

1. PROGRAM PLANNING INVOLVING COMMUNITY MEMBERS AND PARENTS
2. PERSONNEL SELECTION AND RECRUITMENT
3. PRE-SERVICE TRAINING, AND
4. ORDERING OF SUPPLIES AND EQUIPMENT AND ARRANGING FIELD TRIPS

IF A GIVEN SCHOOL SYSTEM WANTS TO RADICALLY CHANGE ITS PROGRAM, WE SUGGEST THAT THE TITLE I OFFICE CONSIDER INITIATING A PRE-PROPOSAL REVIEW TO AVOID LAST MINUTE REJECTION.

Many of the deadlines are somewhat inflexible and badly timed due to Congressional appropriation schedules. This has been documented by any number of studies and represents a serious obstacle to effective program planning and administration.[25] We therefore recommend:

(3) THAT THE STATE DEPARTMENT OF EDUCATION DETERMINE THE OPTIMUM TIME(S) FOR RECEIVING MONIES FROM THE U. S. OFFICE OF EDUCATION AND PRESS FOR A REVISION IN U.S.O.E. POLICY THROUGH EVERY AVAILABLE CHANNEL USING EVERY AVAILABLE MEANS.

When pre-service or in-service training is not carefully planned, it tends to be taken over by a concern for administrative details or specific problems as perceived by the staff. If training is related only to problems as they arise, very often important aspects of training are neglected and if it is too informal, it tends not to be conducive to a disciplined inquiry and acquisition of important knowledge. With the wealth of knowledge accumulating in the area of compensatory education, all teachers should be exposed to it. Although independent study should not be discouraged, there are advantages to a well planned training program characterized by extensive interaction among staff members. It helps to achieve a cohesiveness and integrity of the project when it is operational, and particularly so when staff members are directly involved in the planning of their own pre-service and in-service training. For these reasons we recommend:

(4) THAT PRE-SERVICE AND IN-SERVICE TRAINING BE CONSIDERED AN INTEGRAL PART OF EACH PROJECT WHICH REQUIRES CAREFUL PLANNING CONSISTENT WITH THE CURRICULUM FOR STUDENTS, THE OBJECTIVES OF THE PROJECT, AND THE TRAINING NEEDS OF THE STAFF.

Good programs depend on good planning and good planning involves identification of needs and setting priorities. Our data indicate that more attention should be given to this aspect of planning. Our recommendation is:

(5) THAT THE STATE DEPARTMENT PROVIDE SOME SPECIFIC GUIDELINES AND SUGGESTIONS FOR PROJECTS TO FOLLOW IN IDENTIFYING NEEDS AND SETTING UP THEIR OWN PRIORITIES.

Deciding how specific needs are to be met constitutes one of the greatest challenges in planning. Without the assistance of theories concerning learning and the problems faced by the disadvantaged--theories which research has begun to demonstrate as useful and productive, programs can be planned on a trial and error basis only; and, if evaluation is inadequate, errors can never be identified. Project data show a real lack of the use of theory in planning. We therefore recommend:

(6) THAT TITLE I PROGRAM PLANNERS BE ENCOURAGED TO IDENTIFY AND DOCUMENT A THEORETICAL BASIS FOR THE PROJECT CONTENT AND METHOD AS PART OF THEIR PROPOSALS.

In many cases, planning took little effort because the project was being repeated. Further, our data indicate that usually there was no justification, based on the project's demonstrated efficacy, for repeating it. Under this arrangement, ineffective, useless, or even harmful elements of projects may be repeated. Even if a given activity is just useless in itself, it is still harmful because it takes the child away from the regular classroom where he would be learning something.[26] We therefore recommend:

(7) THAT THE STATE DEPARTMENT TITLE I OFFICE REQUIRE DOCUMENTATION FROM SOUND EVALUATION PROCEDURES THAT THE PREVIOUS YEAR'S PROJECT HAS BEEN SUCCESSFUL OR SHOWN SUBSTANTIAL PROGRESS BEFORE APPROVAL FOR REPETITION OF THE PROJECT IS GRANTED.[27]

FORMULATION OF PROJECT OBJECTIVES

SUMMARY OF FINDINGS

- *In general, project objectives were not expressed in behavioral terms*[28,29]
- *Success criteria for projects and/or students were rarely defined*
- *Generally speaking, project objectives were congruent with the needs specified*
- *Only a few of the projects had objectives which reflected an awareness of the need for disadvantaged youngsters to learn at a rate above the norm*

RECOMMENDATION

(Recommendation no. 8 is a high priority recommendation and appears in the section "Four Critical Courses of Action.")

SELECTION OF PROJECT PARTICIPANTS

SUMMARY OF FINDINGS

- *Generally speaking, projects are serving the appropriate population, but selection criteria are not consistent or uniform*
- *In a few cases Title I funds support summer programs to which anybody may come*

RECOMMENDATIONS

(9) THAT MORE SPECIFIC GUIDELINES AND ASSISTANCE BE PROVIDED BY THE STATE DEPARTMENT TITLE I OFFICE TO LOCAL SCHOOL DISTRICTS FOR DETERMINING ELIGIBILITY FOR PARTICIPATION IN PROGRAMS IN ACCORDANCE WITH THE INTENT OF TITLE I LEGISLATION AND THAT THE TITLE I OFFICE CONSIDER REQUIRING MORE DETAILED INFORMATION ON CRITERIA FOR SELECTING STUDENTS.[30,31]

(10) THAT SUMMER PROJECTS BE MORE CAREFULLY MONITORED TO INSURE THAT TITLE I FUNDS ARE NOT BEING USED TO FINANCE

A REGULAR SUMMER SCHOOL WHICH CAN BE ATTENDED BY ANY-ONE AND WHICH SHOULD BE FINANCED BY LOCAL DISTRICTS.[32]

PROJECT EVALUATION

SUMMARY OF FINDINGS

- * *A little less than half the projects reported no evaluation design*
- * *Pre-test, post-test was most common design used*
- * *Control groups were rarely used (only one case in the sample)*
- * *No attempts were made to measure any characteristics of the environment that may have a bearing on learning*
- * *There was a general lack of communication about Title I students from summer projects to winter ones*
- * *74% of the projects used standardized tests to evaluate student progress, achievement batteries being the most popular*
- * *Very little testing in areas of self-image and attitude change, in spite of the fact that these were prominent aspects of program objectives*
- * *Considerable testing that was done did not pertain directly to program objectives*
- * *Data collected for evaluation purposes were frequently not utilized; 22 out of 36 projects made little or no effort to analyze data*
- * *Evaluation procedures were generally unsophisticated and were not built into the project as an ongoing process*

RECOMMENDATIONS

(Recommendations 11 - 16 are considered high priority recommendations and appear in the section "Four Critical Courses of Action.")

Evaluation has always been required for Title I,[33] but too loose a definition of evaluation has been applied in approving and monitoring projects. Good evaluation requires financial support. In many cases more resources than are currently permissible may be needed. We recommend:

(17) THAT THE STATE DEPARTMENT SEEK, THROUGH WHATEVER APPROPRIATE MEANS, TO HAVE FISCAL POLICIES RELATED TO ALLOCATIONS FOR EVALUATION CHANGED TO ENCOURAGE MORE SUBSTANTIAL SUPPORT FOR EVALUATION.[34]

To upgrade further the quality of evaluation, we recommend:

(18) THAT SPECIFIC GUIDANCE THROUGH THE TITLE I STATE DEPARTMENT OFFICE (WHICH MAY FIND IT HELPFUL TO DRAW UPON CONSULTANTS FROM APPROPRIATE UNIVERSITY DEPARTMENTS) BE GIVEN TO LOCAL DISTRICTS WHO ARE PLANNING A TITLE I PROGRAM ON:

- (a) MODELS OF ACCEPTABLE EVALUATION DESIGNS AND PROCEDURES;[35]
- (b) WHAT KINDS OF TESTS AND MEASUREMENTS ARE

VALIDATED AND APPROPRIATE (PARTICULARLY IN THE AREAS OF SELF-IMAGE AND ATTITUDE CHANGE) TO USE IN CONJUNCTION WITH GIVEN PROGRAM OBJECTIVES;[36]

(c) TYPES AND METHODS OF USING UNOBTRUSIVE MEASURES;[37]

(d) HOW TO ANALYZE, USE, AND STORE DATA SO THAT THE INFORMATION IS HELPFUL IN INTRODUCING MODIFICATIONS TO IMPROVE THE PROGRAM;

(e) WAYS OF HANDLING EVALUATION IN THE CASE OF JOINT OR COOPERATIVE PROJECTS, PARTICULARLY THOSE INVOLVING NON-PUBLIC SCHOOLS;[38] AND,

(f) PERT CHARTING OR SOME OTHER SIMILAR DEVICE FOR SETTING UP AND MONITORING THE EVALUATION PROCESS.[39]

Putting theory into practice and ascertaining its efficacy over a long period of time is of primary importance. Our data indicate that such demonstrations are needed and would be extremely useful for ongoing projects. They would undoubtedly serve as a powerful stimulus for modifying and improving many of

the projects which are repeated annually. We therefore recommend:

(19) THAT THE TITLE I STATE DEPARTMENT OFFICE CONSIDER SETTING UP A SAMPLE OF PROJECTS FOR LONGITUDINAL EVALUATION OF THE EFFECTIVENESS OF TITLE I PROGRAMS. THIS WOULD NECESSITATE DETERMINING THE KINDS OF DATA TO BE COLLECTED AND ASSISTING LOCAL DISTRICTS IN SETTING UP AN APPROPRIATE SYSTEM FOR COLLECTING AND STORING THE DATA. OF PARTICULAR CONCERN HERE ARE: THE COMPARATIVE EVALUATION OF PAIRED MODELS OF TITLE I PROGRAMS WHICH VARY ON ONE DIMENSION, SUCH AS THOSE PROGRAMS SERVING THE SAME AGE GROUP EACH YEAR COMPARED TO THOSE FOLLOWING-THROUGH ON THE SAME STUDENTS FOR SEVERAL CONSECUTIVE YEARS AS STUDENTS CHANGE FROM ONE GRADE TO ANOTHER; THE COMPARATIVE MERITS OF SUMMER VS. WINTER PROJECTS; THE COMPARATIVE MERITS OF HIGHLY STRUCTRUED VS. A GENERAL ENRICHMENT, RELATIVELY UNSTRUCTURED APPROACH; AND, WAYS OF DETERMINING HOW VERY SMALL ALLOCATIONS OF FUNDS CAN BE MOST EFFECTIVELY USED.

PROGRAM MODIFICATION

SUMMARY OF FINDINGS

* *Evaluation reports rarely included recommendations for program modification; evaluation procedures were seldom used as feedback system for immediate modification*

* *Evaluation reports were not widely disseminated; few teachers received them*
* *Title I practices are having an effect on regular school teaching methods, but more systematic communication is needed*
* *The evaluation component of most projects did not undergo any evaluation itself, there being a general lack of evaluation expertise on local staffs*
* *There were no cost-effectiveness systems employed in the projects*

RECOMMENDATIONS

(Recommendations 20 and 21 are high priority and are contained in "Four Critical Courses of Action.")

(22) THAT THE STATE DEPARTMENT TITLE I OFFICE PROVIDE TITLE I PROJECT PLANNERS WITH GUIDELINES FOR SETTING UP MODIFICATION PROCEDURES IN RESPONSE TO AN ONGOING FEEDBACK PROCESS MAINTAINED AS A TEACHING STAFF AND ADMINISTRATIVE RESPONSIBILITY.[40]

(23) THAT PROJECTS BE ENCOURAGED TO INCREASE COMMUNICATION BETWEEN TITLE I AND NON-TITLE I PERSONNEL IN REGARD TO SPECIFIC TITLE I CHILDREN SO THAT BETTER CONTINUITY OF PROGRAMMING CAN BE MAINTAINED.

A substantial portion of educational programming in the public school system goes unevaluated. Yet there is no good reason why it, too, should not be evaluated. If it were, it could help to provide useful perspectives on Title I programs, while at the same time supplying the means for its change and improvement. For this reason we recommend:

(24) THAT EVALUATION REPORTS BE DISSEMINATED TO THE REGULAR SCHOOL SYSTEM'S PERSONNEL AS WELL AS TO ALL MEMBERS OF THE PROJECT STAFF SO THAT ADOPTION OF EFFECTIVE TITLE I METHODS AND MATERIALS MAY BE ENCOURAGED IN THE REGULAR SYSTEM;[41] and,

(25) THAT THE STATE DEPARTMENT OF EDUCATION BEGIN TO ENCOURAGE SCHOOL DISTRICTS TO EVALUATE THEIR REGULAR PROGRAMS, DRAWING ON THE EXPERIENCE OF TITLE I PERSONNEL.

In the 1968 report on Title I compiled by the Title I Office of the State Department, a note was made that there was no way to "draw conclusions about the relationships between project cost and project effectiveness."[42] Yet this is an important part of evaluation and cannot be ignored. We therefore recommend:

(26) THAT THE STATE DEPARTMENT GIVE SOME CONSIDERATION TO

COST-EFFECTIVENESS[43] AND TO LONG-RANGE PLANNING INVOLVING THE DEVELOPMENT OF ACCOUNTING SYSTEMS FOR TITLE I PROJECTS IN ACCORDANCE WITH NEW METHODS OF PROGRAM BUDGETING.[44]

PART II: PROJECT STAFFING, TRAINING, AND CURRICULUM

STAFF CHARACTERISTICS, SELECTION, AND RECRUITMENT

SUMMARY OF FINDINGS

* *26% of projects (out of 39 from which data were available) had teaching experience with disadvantaged children, but no specific training congruent with Title I assignments*

* *About half of the project directors assumed that responsibility as an added duty (no release time for it)*

* *42% of the projects used teacher aides and/or other para-professionals as part of the support staff; such staff rarely had any significant amount of training*

* *While minority group representation on the staffs of programs serving minority groups was given some consideration, more attention in this area is needed.*

* *On the whole, Title I project staffs are comprised of devoted educators who have a positive attitude about the work they are doing, though attitudes related to expectations of pupil performance could be improved*

RECOMMENDATIONS

If programming is to be effective, objectives must be matched by resources adequate to carry them out. If resources are scarce or limited, it is more worthwhile to pick one single objective of high priority and allocate all available resources to achieve it than to spread resources so thinly that nothing is accomplished. Our data indicate that insufficient attention has been given to this problem. We therefore recommend:

(27) THAT WHEN PROPOSALS ARE REVIEWED MORE ATTENTION BE GIVEN TO THE RELATIONSHIP BETWEEN PROGRAM OBJECTIVES AND STAFFING PATTERNS WITH PARTICULAR REFERENCE TO THE NEED FOR FULL-TIME PROGRAM DIRECTORS AND/OR REALISTIC AMOUNTS OF RELEASE TIME, BOTH FOR PLANNING AND IMPLEMENTATION, PARTICULARLY IN THE CASE OF LARGER PROJECTS.

During the last few years some effort to determine the effectiveness of teacher aides has been made. The Bank Street College of Education study identified multiple benefits.[45] Our data indicate that we are deprived of some of those benefits because of legal restrictions placed on the functions of aides. We recommend:

(28) THAT THE STATE DEPARTMENT OF EDUCATION CONSIDER THE FORMULATION AND INTRODUCTION OF LEGISLATION WHICH

WOULD EXTEND THE FUNCTIONS OF A TEACHER AIDE SO THAT THESE KINDS OF SUPPORT PERSONNEL CAN BE MORE EFFECTIVELY USED IN HELPING THE TEACHER TO MANAGE THE TEACHING/LEARNING PROCESS. THESE EXTENDED FUNCTIONS SHOULD CERTAINLY INCLUDE, BUT NOT BE LIMITED TO, READING TO THE CHILDREN, LISTENING TO THEM READ AND CORRECTING THEIR MISTAKES, AND ASSISTING STUDENTS GENERALLY IN WORKING WITH ANY KIND OF PROBLEM, ALL UNDER THE DIRECT SUPERVISION OF THE TEACHER TO WHOM THE AIDE IS ASSIGNED.[46,47,48,49]

Because significant emotional support from staff and attitudes reflective of positive expectations are so critical to the performance of disadvantaged children, having those kinds of attitudes and the capacity to give that kind of support should be an important selection criterion for Title I staff. Although our data do not reveal a critical problem in this area, it still needs to be emphasized and we therefore recommend:

(29) THAT THE STATE DEPARTMENT TITLE I OFFICE FIND WAYS OF ENCOURAGING PROJECT ADMINISTRATORS TO HIRE MINORITY GROUP MEMBERS FOR TITLE I PROJECTS, PARTICULARLY IN THE CASE OF PROGRAMS SERVING POPULATIONS WHICH INCLUDE SUCH MINORITY GROUPS AND TO GIVE SERIOUS CONSIDERATION TO ATTITUDES TOWARDS THE DISADVANTAGED ON THE PART OF ALL APPLICANTS.[50]

PRE-SERVICE AND IN-SERVICE TRAINING

SUMMARY OF FINDINGS

- *Less than half of the projects had pre-service for their staff members*
- *Over half of the projects reported no in-service training*
- *What staff training there was frequently did not focus directly on project objectives and usually lasted only one or two days*

RECOMMENDATIONS

(30) THAT SCHOOL DISTRICTS BE REQUIRED TO PROVIDE EVIDENCE IN THEIR PROPOSALS THAT STAFF MEMBERS HAVE THE EXPERIENCE NECESSARY TO TEACH IN TITLE I PROGRAMS IN TERMS OF THE OBJECTIVES AND REQUIREMENTS OF THE PROJECT AND/OR THAT ADEQUATE PROVISION IS MADE FOR PRE- AND IN-SERVICE TRAINING;

(31) THAT IN CASE OF PROJECTS UTILIZING TEACHER AIDES, THEY RECEIVE TRAINING SPECIFIC TO THE ROLES THEY ARE EXPECTED TO PERFORM, AND THAT TEACHERS BE TRAINED IN HOW TO SUPERVISE AND WORK WITH AIDES;[51]

(32) THAT STUDY OF THE EVALUATION OF THE PREVIOUS YEAR'S

PROGRAM BE MADE A REGULAR PART OF THE PRE-SERVICE TRAINING OF STAFF MEMBERS OF ANY CURRENT YEAR; AND,

(33) THAT PRE-SERVICE TRAINING INCLUDE DEVELOPING A THOROUGH KNOWLEDGE OF THE EVALUATION ASPECTS OF THE PROJECT AND THE SPECIFIC OBJECTIVES OF THE PROGRAM IN TERMS OF BEHAVIORAL OUTCOMES.

LEARNING HOW TO LEARN--DEVELOPING EFFECTIVE LEARNERS

SUMMARY OF FINDINGS

* *Such abilities as recall, comprehension, application, analysis, synthesis, evaluation, convergent and divergent thinking were required of students in varying degrees, but practically nothing was done to teach these processes of dealing with information*

* *50% of the projects considered listening, observing, following directions, vocabulary and word reasoning, and speech as most important, while*

* *Recording, attending behavior, test taking skills, study habits and visual discrimination skills were considered as relatively important, and*

* *25% of the projects listed problem solving, participation in social groups, and information seeking behavior as least important*

* *No project placed a major emphasis on teaching students how to learn by focusing on a development of the above kinds of skills and capacities*

RECOMMENDATION

(The recommendation pertaining to this subsection, no. 34, is considered a high priority recommendation and appears in "Four Critical Courses of Action," page 8.)

MOTIVATIONAL ASPECTS OF THE PROGRAM

SUMMARY OF FINDINGS

- *45% of projects from which data were available made efforts to individualize prescriptions for learning*
- *Less than half the projects identified weaknesses or strengths in ways that would enable a program to be geared to either or both*
- *25% of the projects indicated that they had given consideration to students' interests as a means of insuring motivation*
- *33% of the projects reported that experiential background of students was considered when curriculum was planned*
- *72% of the projects took ability into consideration when planning curriculum*
- *74% of projects had no curriculum materials which made favorable reference to ethnic minorities*
- *Most of the projects used materials organized in short sequential steps to facilitate learning*
- *Half of the projects provided for continuous and immediate success experiences*

- 55% of the projects made a conscious use of reward and punishment as a means of increasing motivation
- Less than a third of the projects made any attempts to analyze student self-concepts with a view towards improving them
- Games, dramatics, etc., were used by many projects but the motivational potentialities of participation in art activities were generally overlooked
- Practically all projects used a wide variety of special materials

RECOMMENDATIONS

Individualization of instruction is one of the most basic responses to the need for disadvantaged children to achieve at a rate above the norm. Much of the Title I instruction, particularly in the summer projects, reflected an acceptance of this principle. It was also evident that the State Department Title I Office had made efforts to hold the line on numbers of children being served so that teaching efforts could be individualized as much as possible and not diluted to a point where the teaching approach could not take individual pupil needs into consideration. However, more encouragement for improving the quality of individualized instruction is needed. Few teachers have been trained to teach on this basis; yet, to be effective in the approach, techniques different from those used in teaching larger classes must be employed. We therefore recommend:

(35) THAT AN INCREASED EMPHASIS BE PLACED ON THE INDIVIDUALIZATION OF INSTRUCTION, PARTICULARLY DURING THE WINTER PROJECTS, AND THAT INCLUDING INFORMATION AND PRACTICA ON HOW TO INDIVIDUALIZE INSTRUCTION BE ENCOURAGED AS PART OF PRE-SERVICE AND IN-SERVICE TRAINING OF TITLE I STAFF.

The motivational and cognitive needs of disadvantaged youngsters have direct implications for both curriculum development and teacher training.[52] Our data show that the many considerations related to these needs are familiar to most Title I personnel, but not thoroughly enough to be translated into curricular changes and teaching methods that are maximally effective. It is certain that the level of competence required to achieve the objectives of compensatory education cannot be attained through a few workshops and/or several hours of pre-service or in-service training. However, until long-term training programs are developed by universities (which have only begun to assume this critical responsibility), an improved short pre-service training will have to suffice.[53] We suggest:

(36) THAT THE STATE DEPARTMENT TITLE I OFFICE, POSSIBLY IN COLLABORATION WITH PRIVATE OR PUBLIC INSTITUTIONS CONCERNED WITH EDUCATION OF THE DISADVANTAGED, PROVIDE ASSISTANCE TO LOCAL PROJECTS IN DEVELOPING CUR-

RICULA THAT ARE BASED ON STUDENT NEEDS, INTERESTS, AND EXPERIENTIAL BACKGROUND SO THAT MAXIMUM MOTIVATIONAL SUPPORTS ARE PRESENT WITHIN THE CURRICULUM; AND,

(37) THAT PROJECT PLANNERS AND DIRECTORS BE ENCOURAGED TO CONSIDER THE MERITS OF THE VISUAL ARTS, MUSIC, DANCE, AND THEATRE ARTS AS A MEANS OF MAINTAINING HIGH LEVELS OF INTEREST AND MOTIVATION, FOSTERING COGNITIVE AND PERCEPTUAL GROWTH, AS WELL AS DEVELOPING AESTHETIC SENSITIVITY.[54]

Since relevance of materials is a supportive factor in sustaining motivation, children who belong to minority groups must be able to identify with some aspects of the subculture from which they come as represented in curriculum materials. Given the diversity of the people comprising our society and our commitment to democracy, such representation is also relevant to children who do not belong to a minority group. We therefore recommend:

(38) THAT LOCAL PROJECTS BE ENCOURAGED TO INVEST IN READING AND VISUAL MATERIALS THAT MEANINGFULLY REPRESENT MINORITY GROUPS, WHETHER OR NOT THERE ARE MINORITY GROUP MEMBERS PRESENT IN THE PROJECTS OR ON PROJECT STAFFS.

PARENTAL, HOME, AND COMMUNITY INVOLVEMENT

SUMMARY OF FINDINGS

- *62% of projects from which data were available had not taken into consideration the influence of the home on the learning of Title I students in the way in which the program was set up*
- *In over half the projects parents were not actively involved*
- *66% of the projects from which data were available indicated no community involvement*

RECOMMENDATIONS

The American Institutes of Research in a study designed to identify features of a "successful" compensatory education program listed active parental involvement as one very important factor.[55] Research has also demonstrated the influence of significant others, particularly parents, can have on school performance. Our data show a need to strengthen this aspect of Title I programs. The trend to increase parental and community involvement because of their promise for supporting educational objectives effectively is consistent with our recommendation:

(39) THAT PROJECT PLANNERS BE ENCOURAGED TO INVOLVE PARENTS AND COMMUNITY IN TITLE I PROJECTS TO A MUCH GREATER DEGREE THAN PRESENTLY EXISTS AND THAT PROPOSALS BE REQUIRED TO SPECIFY THE NATURE OF INVOLVEMENT ON ALL

LEVELS: PLANNING, IMPLEMENTATION, AND EVALUATION;

(40) THAT SCHOOL DISTRICTS BE ENCOURAGED TO CONSIDER EDUCATIONAL AND SOCIAL SERVICES FOR PARENTS AS PART OF THE TITLE I PROGRAM AND THAT SUCCESSFUL EFFORTS IN THIS AREA BE DISSEMINATED TO OTHER PROJECTS; AND,

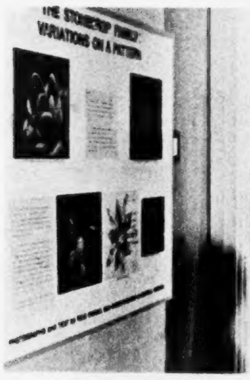
(41) THAT PROJECT DIRECTORS BE MADE RESPONSIBLE FOR DISSEMINATING INFORMATION ABOUT THEIR PROJECTS TO PARENTS AND APPROPRIATE COMMUNITY AGENCIES ON A REGULAR BASIS.

(Recommendations 42 and 43 are high priority recommendations and can be found on pages 16 and 18 respectively.)

THE GENERAL RECOMMENDATIONS

With so many unforeseen and uncertain contingencies on which federal funding rests, we recommend:

(44) THAT THE STATE DEPARTMENT OF EDUCATION BEGIN TO ENCOURAGE SCHOOL DISTRICTS TO ASSUME PROGRESSIVELY MORE RESPONSIBILITY FOR FINANCING COMPENSATORY EDUCATIONAL SERVICES AS A PART OF THEIR REGULAR SCHOOL BUDGETS.[56]



Our survey data indicate that there are over 30,000 children in the Commonwealth who need compensatory services but aren't getting them. This represents a growing liability to the State which will be a far more costly problem to deal with when these children become adults. We recommend:

(45) THAT LEGISLATION BE ENACTED TO APPROPRIATE STATE FUNDS TO SUPPLEMENT THE FEDERAL FUNDS FOR OVER 30,000 CHILDREN NEEDING COMPENSATORY SERVICES WHO ARE NOT NOW RECEIVING THEM AND FOR SETTING UP PROGRAMS TO TRAIN EVALUATION SPECIALISTS AND COMPENSATORY EDUCATION PERSONNEL.

Many programs have similar objectives and problems. Without exchange of information among them, there is a duplication of effort and an unnecessary repetition of unsuccessful approaches. We therefore recommend:

(46) THAT THE STATE DEPARTMENT OF EDUCATION HELP TO PROVIDE A GREATER DEGREE OF COORDINATION AMONG ALL COMPENSATORY EDUCATION PROGRAMS (HEADSTART, FOLLOW THROUGH, UPWARD BOUND, TEACHER CORPS, NEIGHBORHOOD YOUTH CORPS, ETC.) THROUGH SUCH MEANS AS DISSEMINATION OF INFORMATION, SPONSORING CONFERENCES, AND WORKING DIRECTLY WITH THE DIFFERENT PROGRAMS TO BRING THEIR PERSONNEL TOGETHER FOR CONSULTATION ON MUTUAL PROBLEMS.

Our data show that most of the Title I programs include children in the early grades. On the strength of many research findings which point out how certain early experiences are crucial to later learning, we believe that even more emphasis should be placed on reaching the very young. We therefore recommend:

(47) THAT THE STATE DEPARTMENT OF EDUCATION ADOPT A GENERAL POLICY OF GIVING PRIORITY TO THE PREVENTION OF LEARNING DIFFICULTIES RATHER THAN ON REMEDIATION AND THAT CONCRETE STEPS BE TAKEN TO EXPAND PRESCHOOL PROGRAMS AND THE TRAINING OF SPECIALISTS IN EARLY CHILDHOOD EDUCATION.

Finally, because such study documents as this are frequently filed and forgotten after a short time, we recommend:

(48) THAT THE STATE DEPARTMENT OF EDUCATION SET A DATE FOR AN ANNUAL REVIEW OF ALL RECOMMENDATIONS UNTIL THOSE WHICH ARE FOUND TO BE BOTH ACCEPTABLE AND FEASIBLE ARE CARRIED OUT AND THAT SOME APPROPRIATE OFFICE OR AGENCY BE CHARGED WITH THE RESPONSIBILITY OF THE REVIEW.

IMPLEMENTATION OF THE RECOMMENDATIONS

Given the abundant endowment of educational resources in the Commonwealth and its impressive history and tradition of educational leadership, high expectations for action based on these recommendations are justified. But action arising out of recommendations is not likely to occur unless specific people, agencies, and institutions see what roles they have to play in effecting change and accept responsibility for doing something about it. The intent of the following suggestions is to help clarify roles and responsibilities of different agencies and institutions in the State in regard to the implementation of the recommendations of this study.

State Department of Education: There is no way to escape the conclusions:

(1) That strong leadership in the State Department of Education is absolutely essential to the successful implementation of the recommendations of this document, and

(2) That without implementing these recommendations there is no hope of providing equal educational opportunities to the State's disadvantaged children.

No other agency in the State is in such a favorable and strategic position to effect educational change.

Recommendations of primary concern to the State Department of Education:

Numbers 3, 5, 8, 10 17, 24, 25, 26, 28, 29, 43, 44, 45, 46, 47, 48.

One of the most critical functions of State Department leadership is to work around the inevitable resistance to the proposed changes at whatever levels or positions this resistance may manifest itself. A promising way to achieve this is to invest resources in those parts of the system that are least resistant or actively ready for change in a way that will produce new models which can be shown to work better than the old ones. Something that works better tends to sell itself and wins acceptance. This is essentially the approach we are recommending. To do this, however, will require several kinds of initiative and support from the State Department of Education:

1. Allocation of financial resources needed to strengthen the position and work of those who are willing and able to develop new models of compensatory education. (In the case of Title I and other federally funded programs, a considerable amount of financial support could be made available without even increasing the current budget simply by using all that has been allocated rather than sending back large unused amounts to Washington.)

2. Coordination of the efforts of those who have a contribution to make toward the development and refinement of new models (i.e., professionals working in Headstart, Follow-Through, Upward Bound, Neighborhood Youth Corps, etc.).

3. Introduction of the model(s) in selected localities where the needs are great and maximum visibility is

possible and dissemination of information concerning successful approaches to programs with related objectives.

4. Formulation, introduction, and support of legislation that will be required to legalize some changes and provide supplementary financial resources from the State to meet the needs of the disadvantaged.

Particular agencies within the State Department have especially significant roles to play. The Title I office is perhaps the most important office within the State Department for effecting change in compensatory education because it has the power to implement a large number of the recommendations directly. Where resources needed to carry out a given recommendation are not available from the Title I office itself, it can assume the responsibility for involving other agencies or institutions which can provide whatever is required. In many instances, the Title I office can also put local projects in touch with sources of needed expertise and encourage them to use their budgets in imaginative ways. Since this office is responsible for reviewing proposals for funds and approving or disapproving them, it is in a position both to provide guidance and encourage compliance with requirements, particularly those concerned with evaluation (See Appendix VIII, page 343, for a description of the functions and responsibilities of this office.)

Recommendations of primary concern to the Title I office of the State Department of Education:

Numbers 1 through 24
26 through 43
45, 47, 48

The Board of Higher Education should insist that schools of education in state colleges and universities give some priority to training compensatory education personnel and evaluation specialists to fill the manpower shortages in these areas. For the Title I office to require local school districts to plan and carry out adequate compensatory education programs and evaluate them when there is little or no trained manpower to do this is as unrealistic as it is unjust. In effect, it is an unenforceable requirement and so funds will inevitably continue to be spent on programs that are inadequately staffed. Yet, it is morally reprehensible for the State to continue accepting federal funds if it will not comply with the requirements of the Title I Legislation; and, it cannot comply with the intent of the legislation without the highly trained personnel needed to staff the projects. The Board of Higher Education can play an important part in getting institutions of higher learning to rise to this challenge.

Recommendations of primary concern to the Board of Higher Education:

Numbers 12, 14, 28, 34, 42, 43, 47, 48.

State Legislature: The appropriate committees of the State Legislature will need to collaborate with the State Department of Education and professional organizations in the State in introducing legislation that will provide the state funds needed to guarantee equal educational opportunities for all disadvantaged children, particularly for those many thousands of children not even reached

Recommendations of primary concern to the State Legislature:

Numbers 17, 25, 28, 44, 45, 47, 48.

by federally funded programs. This document itself can serve as one important source of information to members of the Legislature on the current status of compensatory education in the State. It is clear that the work to provide compensatory educational services to the disadvantaged children of the Commonwealth, initiated by the State through the Willis-Harrington Commission, has only begun. Carrying out the recommendations of this study will in the final analysis depend upon the active support of the Legislature. While the cost of carrying out these recommendations will be substantial, it will be far more economical than bearing expenses of the unmet educational needs of the disadvantaged when they develop into the costs of unemployment compensation, crime, delinquency, welfare, and the perpetuation of the cycle through the next generation--a perpetuation which guarantees a heavy burden on the tax payers in the future.

Colleges and Universities: University personnel have often been quick to criticize the inadequacies of compensatory education in the public schools and notoriously slow in developing appropriate curricula and training for the kinds of personnel needed to help the schools improve their programs. Given the responsibility that state colleges and universities have for staffing the public schools, they have no reason to wait for the State Department of Education to

Recommendations of primary concern to colleges and universities:

Numbers 1, 4, 6, 12, 14, 15, 16, 18, 19, 21, 29, 31 through 38, 43, 47.

insist that they provide pre-service and in-service programs for training evaluation specialists, compensatory education personnel, and specialists in pre-school or early childhood education. In addition, a far greater effort to carry out longitudinal research on the disadvantaged child and his educational needs has to be made and findings from research applied. Such programs on the college level would, because of their relevance to critical social issues, provide a legitimate means of capitalizing on the genuine idealism of many college students--an idealism that is so frequently expressed in unproductive ways because there appear to be no meaningful alternatives among traditional degree programs.

Local School Districts: A number of basic recommendations (such as refocusing project thrust by generating objectives consistent with the goal of developing competent learners, contracting out the evaluation responsibility to specialists if none are on the local staff, and providing a planned pre-service and in-service training program) can be implemented by local districts and project directors. As model programs are developed, some districts will want to experiment with them in collaboration with the ucational institutions which have developed them. Local districts can also assume the initiative in getting more local resources allocated to compensatory education, including those available through community organizations, both public and private.

Recommendations of primary concern to local school districts:

Numbers 1, 2, 4, 6, 7, 8, 10, 12, 13, 18, 19, 23 through 27, 29 through 41, 43, 44, 46, 47.

Parents: Like many programs for the disadvantaged, very little Title I money goes into the pockets of the poor themselves. The $16 million for Title I in the State is used primarily to pay the salaries of middle-class teachers and administrators. Since the money has been appropriated to help the disadvantaged, most of whom are from low-income families, parents have a right and an obligation to insist that these appropriations are spent on programs which are effective in helping their children to become competent learners so that they can become successful performers in school, prepare for careers that will provide them with economic security as adults, and guarantee for their children a background free from serious disadvantages. If this is not happening, then disadvantaged children and their parents are, in blunt terms, being cheated out of something that is rightfully theirs. Most school systems will welcome the opportunity for more active parental participation in their compensatory education programs. Individual parents and parent organizations should not lose the opportunity to find ways of supporting the efforts the schools are making to brighten the prospects of their children's future.

Recommendations of primary concern to parents:

Numbers 1, 10, 24, 29, 31, 36, 38, 39, 40, 41, 44, 47.

Educational and Professional Organizations: Contributing to the growth of the education professions by increasing the quality and relevance of their training and research programs is a primary objective of most educational and professional organizations. Such organizations can use their influence to help obtain the resources needed to establish model compensatory education projects and the model programs needed to train their staffs. They can do this by helping to disseminate information about them and working to achieve the support of their members and their representatives and colleagues in the Legislature and government agencies.

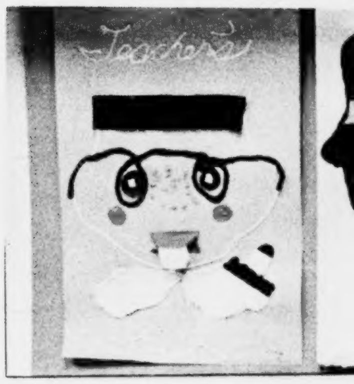
Recommendations of primary concern to educational and professional organizations:

Numbers 19, 24, 28, 31, 34, 37, 38, 42, 43, 45, 47.

Business and Industry: Business and industry can support the proposals made in this document not only by direct financial contribution, but also by developing new curriculum materials and equipment designed to serve the needs of the disadvantaged. They can be particularly effective when the materials they produce represent an application of research findings concerning the education of the disadvantaged. In many cases, business can undertake its own research and speed up the acquisition of important knowledge about teaching the disadvantaged. Business can also provide a critical service by developing models for determining cost-effectiveness of compensatory education programs. Because the task is so great and financial resources always limited, it is doubly important to have sound evaluation components in all programs coupled with some kind of cost-effectiveness determination so that replanning cycles are based on relevant data.

Recommendations of primary concern to business and industry:

Numbers 17, 18, 26, 36, 37, 38, 45, 47.



MODEL PROGRAM FOR TRAINING COMPENSATORY EDUCATION PERSONNEL

Universities have been slow to train a variety of compensatory education personnel as such. Instead, they have offered a few isolated courses on teaching the disadvantaged for those who have cared to take them. Given the magnitude of the problem and the shortage of manpower, this is a woefully inadequate response. Every major study on the disadvantaged underscores the necessity for launching a massive attack on the problem, not by piecemeal efforts, but by developing full-scale programs staffed by highly trained specialists and generalists.

Since no one type of specialist or generalist can possibly fulfill all the needs of disadvantaged youngsters, particularly where there are large numbers to be served, the program we propose is designed to prepare a variety of personnel who can be employed to work as members of a differentiated staff.[57]

Any program staff (e.g., a Title I program staff) may be differentiated in a number of different ways, depending on needs, objectives, and available resources. In whatever way this is done, however, the tasks to be performed and the staff roles which they define should be directly supportive of the major objective of compensatory education: development of competent learners who will be able to "catch up" and stay "caught up."[58]

Characteristics of the Competent Learner: To grasp the context of the training program and in order to determine whether or not the ultimate objective of the model (developing competent learners) is being achieved, it is essential to have a fairly accurate notion of what such learners are like. How to learn is itself a learned process. All learning is not equally germane to that process. Generally speaking, the more that is germane to that process a person is able to learn, the more competent he will be as a learner.[127]

An ineffective learner is one whose accumulated learning precludes, inhibits, slows up or places limitations on the rate and scope of present and future learning. The important point here is this: that disadvantaged students simply given information in subject matter areas (math, science, biology, etc.) as remedial work and perhaps a variety of cultural enrichment experiences to supplement it, but no information and experience that will enable them to master the learning process itself--such students have no hope of "catching up" and staying "caught up." Although temporary gains may be made through remedial efforts, there is no efficient way of consolidating those gains and converting them into permanent assets without mastering the fundamentals of the learning process itself. The unique feature of the model is that it prepares teachers to teach subject matter areas simultaneously with how to learn every step of the way.

The following outline of the capacities which constitute learning competence is general and incomplete.[128] It is presented here in brief form only as a means of focusing attention on the kind of student the educational program should be helping to develop. Eventually these capacities will have to be translated into specific behavioral terms so that persons helping to manage the learning process will be able to analyze the continual feedback such behavior represents for the purpose of introducing those modifications needed to keep the program serving its basic objective effectively.

The competent learner is one who progressively improves his capacity:

(MOTOR) 1. To coordinate, control, and direct the movement and position of voluntary muscles

(PERCEPTUAL) 2. To perceive with reasonable speed and accuracy through all sensory modes

- a. Be aware (receptive to stimuli)
- b. Discriminate among stimuli on a given dimension
- c. Select out irrelevant stimuli and attend to those of interest to the activity at hand (concentration)
- d. Organize and interpret stimuli in preparation for reaction

(COGNITIVE) 3. To think

- a. Memorize (store and retrieve information)
- b. Conceptualize

        - (1) Label events, ideas, of objects (vocabulary development--this includes handling the symbolic systems of language and math)
        - (2) Categorize or classify them (establish criteria and apply them)
        - (3) Name categories, identify them, and utilize them
    - c. Translate from one symbolic form to another
    - d. Interpret data
    - e. Extrapolate and interpolate information
    - f. Apply principles
    - g. Analyze data
    - h. Synthesize data (cognize units)
    - i. Speculate (using fantasy, imagination and intuition)
    - j. Form and test hypotheses
    - k. Transfer knowledge

(AFFECTIVE) 4. To control and manage feelings and emotions
    - a. Bring feelings under rational control[129] (impulse control, particularly)
    - b. Organize feelings (values system formation) so they are supportive of actions which foster continued growth--curiosity

and courage, for instance, are in part symptomatic of such organization

c. Develop commitments which give consistency and efficiency to patterns of development and growth (usually culminating in habits which maintain health at optimum levels and selection and pursuit of one's "life's work")

(VOLITIONAL) 5. To will or intend and carry intentions through to conclusions

a. Initiate action (usually for purpose or goal)

b. Persevere (break major goal down into small units and work towards the achievement of each one)

c. Effect closure or consummate action (achieve goal)

(MORAL) 6. To be reliable and be responsible for actions concerned with human relationships (this rests on the development of a moral sense which leads to behavior and attitudes that are supportive of others' growth and attracts reciprocation of similar attitudes and supportive action)

(AESTHETIC) 7. To appreciate order

a. Apprehend order, grasp the Gestalt of things

b. Have a sense of humor (appreciate a surprising or unanticipated arrangement or order of things)

c. Create (bring a new level of order among parts of things, events, people or ideas)

d. Strive to understand order in ultimate terms, including one's relationship to the universe (apprehension of beauty and ultimate purpose)

It is important to note here that the capacities are all interrelated and interdependent. The language capacity in particular operates on all levels and is necessary, but probably not sufficient, to the achievement of full growth on each level. It should also be noted that enough research has been carried out on psycho-motor, cognitive, and affective development to provide a reasonably sound basis for planning and implementation of these aspects of the model. Little research has been carried out on the volitional, moral, and aesthetic areas. However, some aspects of these areas (psychology of intention and perseverance; social or human relation skills; and, the kinesthetic, affective and cognitive aspects of the arts, respectively) have been explored enough to include them as potentially fruitful areas for experimentation.

Structure and Function of a Model Compensatory Education Program: The kinds of personnel to be produced by the program we propose will, as indicated earlier, be trained to manage the teaching-learning experience (toward the end of developing competent learners) most effectively within the framework of an educational system characterized by a differentiated staffing structure. The following

organizational chart represents one possible compensatory education model with such a staffing pattern (see page 63).[**]

This model and the training program outlined for its staff are both equally applicable to the education of non-disadvantaged students. The way the model works for disadvantaged children differs from the way it works for non-disadvantaged children in that for the former, the diagnostic procedures will identify culturally related deficits and disadvantages which will then have particular experiences prescribed to compensate for them. Methods and approaches of handling discipline, of involving the home and community, and of developing curriculum will vary as the characteristics of the population being served vary.

In the following pages, the main features of the model are specified by:

(1) Designating basic positions in the structure of the model;

(2) Defining the role associated with each position in terms of tasks and the competencies required to perform them; and,

(3) Prescribing the content of training needed to develop those competencies

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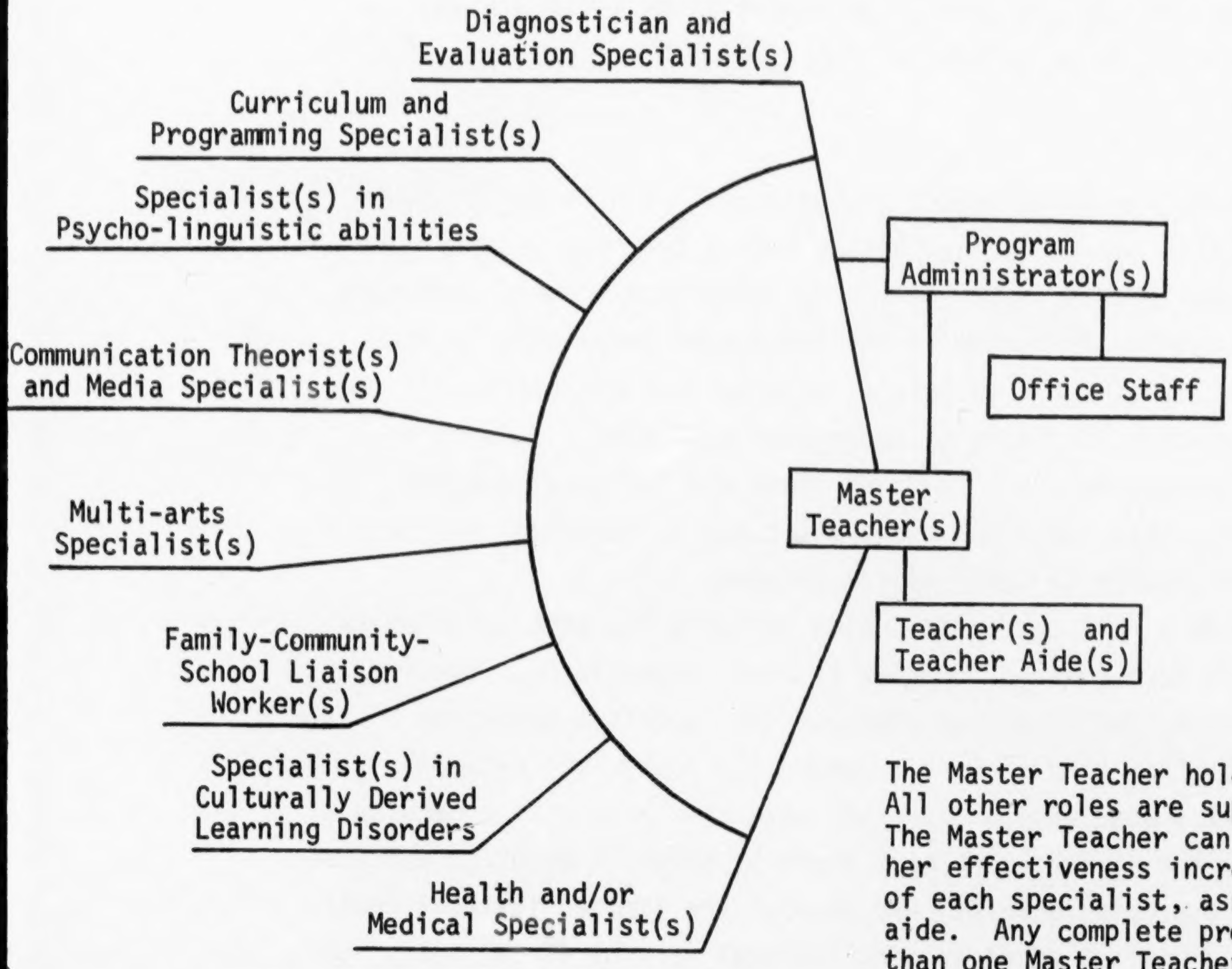
[**] Both the model and the training program for staff positions described by the model were prepared by the author for ANISA (American National Institutes for Social Advancement) and appears here by their permission. ANISA is an incorporated not-for-profit organization devoted to the establishment of educational programs for populations which face difficult problems in growth and development. ANISA programs are based on a concept of education broadly defined as the process by which human potential is released or developed.[59]

In this context, POSITION refers to place in a structure; ROLE refers to behaviors associated with a given position. The tasks specified indicate ROLE or what a person occupying a given POSITION should be able to do. The tasks therefore represent the kinds of competencies expected of someone occupying any given position.

In a good working model, positions are arranged in such a way (structure) that all the roles (function) achieve objectives (purpose) in the shortest amount of time utilizing the least amount of resources possible (efficiency). A good administrator is therefore one who can keep structure and function serving purpose with efficiency.

For the sake of brevity, the complete specifications of the model are not included here. For instance, the relationships among the different staff positions are not spelled out, the specialist functions themselves have not been differentiated, nor the question of pay scales considered. The degree and kind of differentiation possible depends on resources and program objectives. In general, the more students served, the more staff differentiation is possible and desirable. A diagnostician and evaluation specialist, for example, would be more effectively employed if there were several subordinate positions to his office to which such functions as giving tests, collecting data, punching computer cards, scheduling testing times and observation sessions, could be delegated, thereby

DIFFERENTIATED STAFFING ARRANGEMENT FOR MODEL COMPENSATORY EDUCATION PROGRAM


Diagnostician and Evaluation Specialist(s)
Curriculum and Programming Specialist(s)
Specialist(s) in Psycho-linguistic abilities
Communication Theorist(s) and Media Specialist(s)
Multi-arts Specialist(s)
Family-Community-School Liaison Worker(s)
Specialist(s) in Culturally Derived Learning Disorders
Health and/or Medical Specialist(s)
Program Administrator(s)
Office Staff
Master Teacher(s)
Teacher(s) and Teacher Aide(s)

The Master Teacher holds the central position. All other roles are supportive of that role. The Master Teacher can function alone, but her effectiveness increases with the addition of each specialist, assisting teacher and aide. Any complete program will have more than one Master Teacher, each handling different curriculum areas, particularly on the secondary school level, supported by assisting teachers and aides.

freeing the specialist to use his expertise and time in more important ways. Furthermore, to pay a specialist's salary for services that can be competently performed by an assistant who requires less training and/or for clerical work is an uneconomical use of funds.

Selection and Recruitment for Training: In a fully developed model, criteria for selecting persons into a training program for any given position would be specified. This is extremely important, since some people, by virtue of the background they bring to the training situation and a variety of personality characteristics they possess, are more likely to be successful than others. In other words, it is doubtful that training alone can "produce" a model staff member; this therefore makes selection an important determinant of the success of the training program.

Although a full set of selection criteria for each position is not included here, one basic point is worth emphasizing. Stamina plus a certain kind of social idealism are important selection criteria for this kind of work. Today, the young, who naturally tend to have a good deal of stamina, also have a spirit of genuine idealism, often with no effective means by which it might be expressed. Certainly, protests, sit-ins, and marches are limited in their power to inspire a "life's work" in some critical area of social need. Both the rigorous training program proposed here and the work for which it prepares students require stamina and a sense of idealism. Such a program would attract a new "breed" of teacher and help infuse public education with new blood while at the same time filling a manpower shortage and providing a constructive means of channeling the energies of college students into work that is relevant, timely, challenging, and eminently worthwhile.

Training a Differentiated Staff for Competence: The model we propose can only work if the people occupying all the positions are fully competent in their roles. Our program is designed to provide the training that will help to insure such competence at reasonable levels.

A general core of knowledge will be essential to all the roles. As these roles are differentiated to serve special purposes, different kinds of knowledge and skills will have to be added to the general core. Content areas for training are briefly described on pages 87-99. Each description is designated by a number and a name. To conserve space and avoid lengthy duplication of descriptions, only the designations are used when indicating what content areas are prescribed for the training of staff members for given positions in the model. Not every staff member needs to be prepared in each area to the same degree. The number in parentheses at the end of the designations refers to the level of preparation recommended; the higher the number, the greater the depth of preparation indicated. For instance, the Master Teacher might need preparation on level (1) in curriculum theory whereas the curriculum specialist needs preparation on level (3).

Position(s)	MASTER TEACHER TEACHER*
Role (tasks and competencies)	Collaborates with other staff members in the planning for learning; generally manages the teaching-learning process; assumes instructional responsibilitie- in specific curriculum area(s) (math, music, social sciences, etc.); decides on the mode of instruction and selects appropriate media; supervises teachers and/or aides; calls on assistance of support staff as needed; participates in home-community-school activities arranged to provide experiential continuity for child; collaborates in evaluation of student performance, teacher performance, and program effectiveness; helps with in-service training of aides and students doing their practica as teacher interns; keeps abreast of new developments. (The assisting teacher may perform any number of the above roles depending on the ways the talents and skills of Master Teacher(s) and Teacher(s) complement one another.)
Training and Preparation**	1. Nature of the competent learner (3)*** 2. Culture and its relationship to perception and learning (1) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (1) 5. Practicum in techniques for developing perceptual speed and acuity (2) 6. Nature of cognition (3) 7. Memory (2) 8. Conceptual behavior (3) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1)

* The Teacher receives a training program similar to that of a Master Teacher, but may not achieve a high level of competency in all roles. Of course, with additional training or experience, he may become a Master Teacher.

** See pages 87-99 for descriptions of the training experiences listed.

*** Numbers in parentheses signify depth of training needed; the higher the number, the greater the depth required.

11. Management of feelings and emotions--principles of self-control (1)
12. Seminar in motivation (3)
13. Reward and punishment and the nature of encouragement (3)
14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)
15. Seminar and practicum in learning disabilities (1)
16. Anxiety and learning in compensatory education (1)
22. Practicum in selection of media and utilization of different presentation modes (2)
23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)
24. Techniques in developing study skills, study habits, ability to take tests and follow direction (3)
25. Theories and methods of fostering creative potential (1)
26. Theories and techniques for establishing rapport (3)
27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)
28. Compensatory education evaluation (1)
29. The principles of behavioral cybernetics applied to compensatory education (3)
32. Techniques of self-evaluation (3)
36. Practicum in utilization of non-professional personnel (3)
37. Practicum in the utilization of members of the peer group as teachers and planners (3)
38. Curriculum theory and curriculum development (1)
39. Training for specific curriculum area (3)
43. The nature-nurture controversy (1)
44. Race relations (1)

Position	ADMINISTRATOR
Role	Helps to select staff members for the program; collaborates with other staff members in planning, implementing, and evaluating the program and staff performance; generally responsible for administering the program, keeping priorities in mind; budgeting and cost-effectiveness accounting; ordering materials; supervising facilities; participates in home-community-school affairs; makes certain that Master Teacher role has full support from auxiliary staff; prepares reports on program and disseminates information to staff, students, and community; proposal writing and fund-raising.
Training and Preparation	1. Nature of the competent learner (2) 2. Culture and its relationship to perception and learning (2) 3. Kinds of learning and the conditions of learning (1) 4. How to plan for learning (3) 13. Reward and punishment and the nature of encouragement (2) 17. Theory and practicum in contingency management (1) 20. Developing moral behavior for supporting learning (1) 26. Theories and techniques for establishing rapport (2) 28. Compensatory education evaluation (3) 31. Tests and measurements for disadvantaged students (1) 32. Techniques of self-evaluation (1) 34. Supplementary services in compensatory education (2) 35. Practicum in preparation of home environments for cognitive stimulation (1) 36. Practicum in utilization of non-professional personnel (3)

42. Seminar in administration of compensatory education programs (3)
43. The nature-nurture controversy (1)
44. Race relations (3)
45. Desegregation and integration: factors in compensatory education (3)

Position	TEACHER OR STAFF AIDE
Role 1: Aides who are selected to work with "things"	Assist any staff member in any of the following ways: filing typing collecting money taking attendance keeping records duplicating materials audio-visual technician taking inventory report writing policing rooms and grounds ordering supplies grading papers driving or transporting goods, staff, or students
Role 2: Aides who are selected to work with children	Assist any staff member in any of the following ways: playground supervision hall duty supervision of study story-telling and reading field trip chaperones recreational activities supervision assist in parent-home-community work helping to maintain discipline supervise lunch room work with students in groups or individually on learning projects under supervision of staff member
Training	Much of this will be done as on-the-job training and may be preceded by a special pre-service experience related to one or both types of roles.

Position	DIAGNOSTICIAN AND EVALUATION SPECIALIST
Role	Operate diagnostic clinic; provide student performance information for Master Teachers and curriculum specialists; keep performance records on each student; participate in program planning with other staff members; collaborate with learning disorders specialist in assessing student problems and devising solutions; direct the planning of the evaluation and the evaluation itself; supervise student interns.
Training and Preparation	The following courses are supplementary to a thorough training in tests and measurements, research design, and evaluation. 1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (1) 5. Practicum in techniques for developing perceptual speed and acuity (3) 6. Nature of cognition (1) 7. Memory (1) 8. Conceptual behavior (1) 9. Transfer of learning (1) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1) 11. Management of feelings and emotions--principles of self-control (1) 12. Seminar in motivation (1)

13. Reward and punishment and the nature of encouragement (1)

15. Seminar and practicum in learning disabilities (1)

28. Compensatory education evaluation (3)

29. The principles of behavioral cybernetics applied to compensatory education (2)

30. Techniques in the analysis of child behavior (3)

31. Tests and measurements for disadvantaged students (3)

32. Techniques of self-evaluation (3)

35. Practicum in preparation of home environments for cognitive stimulation (1)

44. Race relations (1)

Position	CURRICULUM AND PROGRAMMING SPECIALIST
Role	Assist Master Teachers in general programming and individualizing materials for students; assist Master Teacher in use of materials in class; help prepare materials for parents and for use by children at home; work with A-V specialist in creation of A-V materials; supervise programmed instruction and computer aided instruction; supervise student interns; participate in program evaluation.
Training and Preparation	1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (1) 6. Nature of cognition (3) 7. Memory (3) 8. Conceptual behavior (2) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1) 11. Management of feelings and emotions--principles of self-control (1) 12. Seminar in motivation (1) 18. Seminar in the development of self-image (3) 19. Role of humor, fun, and laughter in educating the disadvantaged (3) 20. Developing moral behavior for supporting learning (2)

21. Practicum in aesthetics in compensatory education (1)

22. Practicum in selection of media and utilization of different presentation modes (3)

23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)

27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)

28. Compensatory education evaluation (1)

31. Tests and measurements for disadvantaged students (1)

35. Practicum in preparation of home environments for cognitive stimulation (2)

37. Practicum in the utilization of members of the peer group as teachers and planners (1)

38. Curriculum theory and curriculum development (3)

40. Computer aided instruction for disadvantaged students (3)

44. Race relations (1)

Position	SPECIALIST IN PSYCHO-LINGUISTICS (AND READING)
Role	Collaborate with Master Teachers and curriculum specialists in planning and implementing programs in language development and reading; work with diagnostician and learning disorders specialist in creating special approaches for students with particular problems; maintain records on all students relative to progress in this area; supervise student interns; participate in program evaluation.
Training and Preparation	The following are supplementary to a thorough background in psychology and reading: 1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (1) 5. Practicum in techniques for developing perceptual speed and acuity (3) 6. Nature of cognition (2) 7. Memory (2) 8. Conceptual behavior (2) 9. Transfer of learning (2) 11. Management of feelings and emotions--principles of self-control (3) 13. Reward and punishment and the nature of encouragement (2) 14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)

15. Seminar and practicum in learning disabilities (1)

16. Anxiety and learning in compensatory education (1)

19. Role of humor, fun, and laughter in educating the disadvantaged (1)

20. Developing moral behavior for supporting learning (1)

21. Practicum in aesthetics in compensatory education (1)

22. Practicum in selection of media and utilization of different presentation modes (1)

23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)

24. Techniques in developing studyskills, study habits, ability to take tests and follow direction (1)

26. Theories and techniques for establishing rapport (3)

27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)

28. Compensatory education evaluation (1)

29. The principles of behavioral cybernetics applied to compensatory education (3)

30. Techniques in the analysis of child behavior (1)

31. Tests and measurements for disadvantaged students (1)

32. Techniques of self-evaluation (1)

35. Practicum in preparation of home environments for cognitive stimulation (1)

37. Practicum in the utilization of members of the peer group as teachers and planners (3)

39. Training for specific curriculum area (3)

40. Computer aided instruction for disadvantaged students (1)
41. Seminar and practicum in psycho-linguistics (3)
44. Race relations (1)

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Position	MEDIA SPECIALIST AND COMMUNICATIONS THEORIST
Role	Assist curriculum specialist and Master Teachers in planning most effective ways of presenting materials to be learned; create necessary audio-visual materials and supports; work with learning disorders specialist in individualizing programs and experiences for students facing particular problems; administer audio-visual services to all staff members; supervise student interns and/or aides; participate in program evaluation.
Training and Preparation	The following training is supplementary to a thorough background in educational media and technology: 1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (3) 6. Nature of cognition (2) 7. Memory (2) 8. Conceptual behavior (3) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (2) 11. Management of feelings and emotions--principles of self-control (3) 12. Seminar in motivation (1)

19. Role of humor, fun, and laughter in educating the disadvantaged (3)

21. Practicum in aesthetics in compensatory education (2)

22. Practicum in selection of media and utilization of different presentation modes (3)

23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (3)

24. Techniques in developing study skills, study habits, ability to take tests and follow direction (2)

25. Theories and methods of fostering creative potential (3)

27. The nature of curiosity and techniques for developing a demeanor of inquiry (3)

28. Compensatory education evaluation (1)

32. Techniques of self-evaluation (1)

35. Practicum in preparation of home environments for cognitive stimulation (1)

37. Practicum in the utilization of members of the peer group as teachers and planners (2)

38. Curriculum theory and curriculum development (1)

40. Computer aided instruction for disadvantaged students (3)

44. Race relations (1)

Position

MULTI-ARTS SPECIALIST

Role

To serve as resource in planning and implementing learning activities centered around an aesthetic mode of inquiry (music, theatre arts, dance, visual arts); coordinate efforts of different Master Teachers in these areas with those specializing in other curricular areas; supervise student interns and/or aides; participate in program evaluation.

Training and Preparation

The following are supplementary to advanced preparation in two or more of the art areas:

1. Nature of the competent learner (3)
2. Culture and its relationship to perception and learning (3)
3. Kinds of learning and the conditions of learning (3)
4. How to plan for learning (3)
5. Practicum in techniques for developing perceptual speed and acuity (3)
6. Nature of cognition (3)
7. Memory (2)
8. Conceptual behavior (2)
9. Transfer of learning (2)
10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1)
11. Management of feelings and emotions--principles of self-control (3)
12. Seminar in motivation (3)
13. Reward and punishment and the nature of encouragement (1)

14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (1)
19. Role of humor, fun, and laughter in educating the disadvantaged (1)
20. Developing moral behavior for supporting learning (1)
21. Practicum in aesthetics in compensatory education (3)
22. Practicum in selection of media and utilization of different presentation modes (1)
23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (2)
25. Theories and methods of fostering creative potential (3)
26. Theories and techniques for establishing rapport (1)
27. The nature of curiosity and techniques for developing a demeanor of inquiry (2)
28. Compensatory education evaluation (1)
32. Techniques of self-evaluation (1)
35. Practicum in preparation of home environments for cognitive stimulation (1)
36. Practicum in utilization of non-professional personnel (1)
37. Practicum in the utilization of members of the peer group as teachers and planners (2)
38. Curriculum theory and curriculum development (1)
39. Training for specific curriculum area (3)
44. Race relations (1)

Position FAMILY-COMMUNITY-SCHOOL LIAISON WORKER

Role

Collaborate with other staff members in planning parts of program relative to home and community involvement; work with parents and/or relatives in preparation of home environments so that they support educational objectives; follow-up on referral services with community agencies; facilitate communication among parents, school people, students and community; help to mobilize home-school-community resources to help solve student problems; supervize student interns and/or aides; participate in program evaluation.

Training and Preparation

The following courses are supplementary to the kind of general background provided traditionally for social workers:

1. Nature of the competent learner (3)
2. Culture and its relationship to perception and learning (3)
4. How to plan for learning (1)
6. Nature of cognition (1)
7. Memory (1)
8. Conceptual behavior (1)
9. Transfer of learning (1)
10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (1)
11. Management of feelings and emotions--principles of self-control (1)
12. Seminar in motivation (3)
13. Reward and punishment and the nature of encouragement (3)

14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)
16. Anxiety and learning in compensatory education (1)
18. Seminar in the development of self-image (3)
20. Developing moral behavior for supporting learning (2)
26. Theories and techniques for establishing rapport (3)
28. Compensatory education evaluation (1)
32. Techniques of self-evaluation (1)
33. Seminar and practicum on family resources in compensatory education (3)
34. Supplementary services in compensatory education (3)
35. Practicum in preparation of home environments for cognitive stimulation (3)
36. Practicum in utilization of non-professional personnel (3)
44. Race relations (3)
45. Desegregation and integration: factors in compensatory education (3)

Position	SPECIALIST IN CULTURALLY DERIVED LEARNING DISORDERS
Role	Collaborate with Master Teacher, diagnostician, and curriculum specialist in planning experiences needed to free students from any kind of learning problem; supervising and evaluating such experiences; work with family liaison person and parents in support of special school program set up to remove learning problems; supervise and help train student teachers and/or aides.
Training and Preparation	1. Nature of the competent learner (3) 2. Culture and its relationship to perception and learning (3) 3. Kinds of learning and the conditions of learning (3) 4. How to plan for learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (3) 6. Nature of cognition (3) 7. Memory (3) 8. Conceptual behavior (3) 9. Transfer of learning (3) 10. The nature of volition and perseverance--increasing the capacity to intend and carry something through to completion (3) 11. Management of feelings and emotions--principles of self-control (3) 12. Seminar in motivation (3) 13. Reward and punishment and the nature of encouragement (3) 14. Handling frustration and failure--identifying and individualizing learning experiences around strengths and interests (3)

15. Seminar and practicum in learning disabilities (3)
16. Anxiety and learning in compensatory education (3)
17. Theory and practicum in contingency management (3)
18. Seminar in the development of self-image (3)
20. Developing moral behavior for supporting learning (2)
23. Techniques in the presentation of materials for individualizing instruction--utilizing the sequential hierarchy of content arrangement and the concrete to abstract approach (1)
24. Techniques in developing study skills, study habits, ability to take tests and follow direction (1)
26. Theories and techniques for establishing rapport (3)
27. The nature of curiosity and techniques for developing a demeanor of inquiry (1)
28. Compensatory education evaluation (1)
29. The principles of behavioral cybernetics applied to compensatory education (3)
30. Techniques in the analysis of child behavior (3)
31. Tests and measurements for disadvantaged students (2)
36. Practicum in utilization of non-professional personnel (1)
44. Race relations (1)

NOTE: This training will not prepare a person to handle emotionally disturbed cases that are extreme, mental retardation, or other forms of organically based disorders.

Position	HEALTH AND/OR MEDICAL SPECIALIST
Role	Assume responsibility for program planning and implementation related to maintenance of health; collaborate with family liaison worker to assure that home conditions are conducive to good health; help with referral service; administer first aid when needed; assist teacher in hygiene instruction; maintain health records on students, etc.
Training and Preparation	The following are supplementary to a standard medical or nursing background: 2. Culture and its relationship to perception and learning (3) 5. Practicum in techniques for developing perceptual speed and acuity (2) 26. Theories and techniques for establishing rapport (3) 34. Supplementary services in compensatory education (3)

DESCRIPTIONS OF CONTENTS OF TRAINING EXPERIENCES

1. NATURE OF THE COMPETENT LEARNER

This aspect of the training involves acquiring a relatively thorough understanding of the program's main objective in terms of the capacities characteristic of a competent learner and how these capacities insure competence. (Refer to the Description of the Competent Learner, page 56.)[97]

2. CULTURE AND ITS RELATIONSHIP TO PERCEPTION AND LEARNING

Culture refers to ways of feeling, thinking, and acting that are transmitted from generation to generation. Understanding a "disadvantaged" child's prior capabilities (including knowledge, attitudes, social skills, etc.) will necessitate understanding how culture shapes these prior capabilities. The culture of the middle-class child provides him with a "hidden curriculum" that prepares him for the traditional school experience. This is particularly true in the case of language development.[61,76,107] This course will give teachers a solid background for understanding the disadvantaged child in broad general terms.

3. KINDS OF LEARNING AND THE CONDITIONS OF LEARNING

One of the primary conditions of learning is the existence of prior capabilities, conditions internal to the learner; there is another category of conditons that are external to the learner; these are matched in various ways and make up different kinds of learning.[60] Growing up in poverty produces a set of prior capabilities different from that the middle-class child will bring to the school situation. "Compensatory education" should refer to the type of system that matches a new kind of external set of conditions to the prior capabilities of the disadvantaged child.

4. HOW TO PLAN FOR LEARNING

This concerns knowledge and application of theories of planning in relationship to teaching and learning and includes defining performance criteria, behavioral objectives, and defining alternative routes to the achievement of instructional objectives on different levels.[63,64,65,110]

5. PRACTICUM IN TECHNIQUES FOR DEVELOPING PERCEPTUAL SPEED AND ACUITY

Students from disadvantaged backgrounds are sometimes known to have reduced perceptual spans, speeds, and acuity. Discussion will center primarily on visual and auditory modes of sensory reception. Exercises for increasing perceptual capacities (using tachistoscopes, projectors, and recorders) are demonstrated and opportunities for training disadvantaged youngsters will be provided.[108,109]

6. NATURE OF COGNITION

This includes a review of the theories of cognitive organization and functioning, with an emphasis on the following cognitive processes:[71,72,73,74] convergent processes, divergent processes, translation from one symbolic form to another, interpretation processes, formation and application of principles, analytic processes, synthesis, evaluation and judgmental processes, and forming and testing hypotheses. A practicum is associated with this course in which students are given instruction in how to work with any given curriculum materials so that these processes in children are strengthened.

7. MEMORY

Certain kinds of experience facilitate storage of information. Forgetting is a special case of not being able to retrieve information that is stored. Though less is known about the processes of memory and information retrieval than is comfortable to admit, enough is known to provide teachers with information that can make a difference in the ability to memorize being developed by children whom they teach.[67,68,69,70,87]

8. CONCEPTUAL BEHAVIOR

One capacity which readily distinguishes a competent learner from an ineffective one is the capacity to form, identify, and utilize concepts. The chief function of conceptual behavior is to enable the organism to bring a manageable order to the inordinate complexity of the environment by classifying objects, events, ideas, behavior patterns, and feelings.[62,66]

9. TRANSFER OF LEARNING

The capacity to transfer knowledge both laterally and vertically is a general factor underlying competence in learning. Certain approaches in teaching help to facilitate transferability. This is of particular importance in helping disadvantaged children "catch up."[77,88] Teachers are given practical exercises in how to induce the transfer of learning as a habitual part of instruction no matter what subject is being taught.

10. THE NATURE OF VOLITION AND PERSEVERANCE--INCREASING THE CAPACITY TO INTEND AND CARRY SOMETHING THROUGH TO COMPLETION

Volition and perseverance are examined in relationship to motivation, aspiration levels, sense of personal future, and self-expectations. Practical ways of helping a child to strengthen these capacities are discussed.[124,110]

11. MANAGEMENT OF FEELINGS AND EMOTIONS--PRINCIPLES OF SELF-CONTROL

Because of frustrations, pressures from injustice and lack of consistent patterns of reward and/or punishment, disadvantaged youngsters may find it difficult to control impulses and aggressive behaviors. This course provides basic information on how to help a student to begin to control himself in constructive ways.[102,103,104,122]

12. SEMINAR IN MOTIVATION

One way of conceptualizing a basic problem facing all students needing compensatory education is in terms of motivation. Without motivation to attend, to pay attention, to become involved in the learning process, little learning takes place. Students who come into the public school system from a different cultural background will experience the structure of values in the public school system as perpetual criticism of them for certain "deficiencies," a focus on failure, rather than on support for positive efforts made. The seminar deals both with theoretical aspects of motivation and the exploration of specific techniques for dealing with practical problems of students requiring compensatory education with particular reference to the way in which teacher attitude and behavior can help foster growth and motivation. The concept of "competence motivation" is also examined.93,106

13. REWARD AND PUNISHMENT AND THE NATURE OF ENCOURAGEMENT

This course reviews the practical applications of research findings concerning reward-encouragement and punishment-discouragement.78,79,83

14. HANDLING FRUSTRATION AND FAILURE--IDENTIFYING AND INDIVIDUALIZING LEARNING EXPERIENCES AROUND STRENGTHS AND INTERESTS

This course examines the ways in which so many remedial efforts fail because they concentrate on weaknesses where there is little interest rather than on strengths. It includes a re-conceptualization of "failure" as nothing more than a useful trial which eliminates one approach and points to a potentially more promising approach to be used on a subsequent trial.

15. SEMINAR AND PRACTICUM IN LEARNING DISABILITIES

The general psychological aspects of learning disabilities will be reviewed, the relevant research literature will be discussed, and the specific applications of principles of remediation will be formulated. The seminar will be limited to a discussion of those learning disabilities which are traceable to cultural rather than organic causes. The practicum will involve the application of contingency management techniques to specific and actual learning problems of students.[125]

16. ANXIETY AND LEARNING IN COMPENSATORY EDUCATION

This course will enable teachers to utilize anxiety as a motivator, to create some anxiety if need be, to control it, and to utilize it in fostering attention, using its reduction as a reinforcer, and as a means of enhancing learning. This course will also be useful for counselors who would like to take advantage of mild states as a means of enabling students to gain insights into their own strengths and weaknesses, and thereby come to know themselves better.[113,114,115,116,117]

17. THEORY AND PRACTICUM IN CONTINGENCY MANAGEMENT

This practicum will be used to train contingency managers for dealing with specific problems in compensatory education where the behavioral pattern of students mitigates against maintenance of attention long enough for learning to be possible. The research literature will be reviewed and actual problems will be set for each student to solve in terms of managing contingencies. Students specializing in learning disorders will remain in the practicum until they are able to demonstrate their capacity to analyze a given teaching-learning problem and solve it by application of Premack's principle (that if behavior A is more probable than behavior B, the probability of behavior B can be increased if it is made contingent upon behavior A). Such techniques may be used to break into student's habit patterns which impair learning efficiency.[130]

18. SEMINAR IN THE DEVELOPMENT OF SELF-IMAGE

The seminar will be devoted to a review of the research literature on the formation of the self-image and its relationship to perception, motivation, emotion, confidence, and competence. Perception refers to the organization of sensory input in terms of past experiences and present needs. The self is perceived by itself in terms of the same organizational principles. It is therefore important for teachers and administrators to understand how their relationship to students and attitudes toward them can create dysfunctional self-images, and to know what can be done to modify a self-image to make it more functional. Of particular importance is a discussion of the self-concept of ability and its relationship to achievement motivation.[92,98,105]

19. ROLE OF HUMOR, FUN, AND LAUGHTER IN EDUCATING THE DISADVANTAGED

This course examines the cognitive and motivational elements in humor. Practical ways of relieving the tediousness of some learning tasks by the injection of humor are discussed.

20. DEVELOPING MORAL BEHAVIOR FOR SUPPORTING LEARNING

"Morality" refers here to the aspects of behavior concerned with relationships among human beings. Certain qualities of a relationship can facilitate or impair learning. For instance, a cooperative spirit facilitates learning while a rebellious one tends to impair it. Moral behavior is learned like most everything else. Those who are cooperative in spirit help others while at the same time attracting support from them.[81,82]

21. PRACTICUM IN AESTHETICS IN COMPENSATORY EDUCATION

This course focuses on the practical ways of utilizing drama, music, art, and dance to develop expressive capacities of disadvantaged students, to increase their abilities to discriminate among various stimulus properties inherent in the arts, and to heighten cognitive development generally. In the past, the arts have been regarded as a nice but unessential addition to the curriculum. This course demonstrates how the arts can function as a solid core of the curriculum in a way that will support and serve intellectual and affective growth in all other areas.[91]

22. PRACTICUM IN SELECTION OF MEDIA AND UTILIZATION OF DIFFERENT PRESENTATION MODES

The purpose of this practicum is to provide exercise in arranging the relationship(s) between student and media so that communication is maximally effective.79,80

23. TECHNIQUES IN THE PRESENTATION OF MATERIALS FOR INDIVIDUALIZING INSTRUCTION--UTILIZING THE SEQUENTIAL HIERARCHY OF CONTENT ARRANGEMENT AND THE CONCRETE TO ABSTRACT APPROACH

This course will enable student-teachers to review any kind of material which students need to learn, extract the essence of it, break it down into small units, and arrange them in a sequential manner so that making errors in mastering the material is greatly reduced. Sequentially arranged information can also be used to identify the exact nature of the difficulty a student might have in comprehending a certain concept. The capacity to translate materials into a sequence of small learning tasks is crucial to a teacher's functioning as part of a compensatory educational program, particularly where the material is difficult or abstract. The course also serves as an introduction to programming material for teaching machines or other kinds of programmed instruction and for arranging explanations on a continuum ranging from concrete to abstract.89,90,12

24. TECHNIQUES IN DEVELOPING STUDY SKILLS, STUDY HABITS, ABILITY TO TAKE TESTS AND FOLLOW DIRECTIONS

This is a short course designed to explain practical means through which students may develop good study habits and skills. (This is particularly appropriate for students planning to work in secondary schools or on the college level where much of the learning is dependent upon independent study.) The course focuses on how to organize material, how to take notes, how to review for exams, how to budget time for studying, how to follow directions, and how to take exams.

25. THEORIES AND METHODS OF FOSTERING CREATIVE POTENTIAL

This course is a practicum in ways and means of identifying a creative person and individualizing instruction in such a way that creativity is not stifled, but, in fact, will enhance and support the child's learning efforts in all areas. Such techniques will be particularly applicable in the case of the child who shows, for instance, artistic abilities but a disinterest in verbal and mathematical skills. The relationship of imagination, fantasy, and intuition to creativity is also explored.[96]

26. THEORIES AND TECHNIQUES FOR ESTABLISHING RAPPORT

The capacity to establish and maintain rapport with students is a critical characteristic of an effective teacher, particularly a teacher who is working with disadvantaged students. This course focuses on theories underlying the kinds of human interactions that lead to rapport and ways of applying theoretical understandings in order to achieve rapport.[98]

27. THE NATURE OF CURIOSITY AND TECHNIQUES FOR DEVELOPING A DEMEANOR OF INQUIRY

This short course focuses mainly on techniques for training students how to get information from adults. Since many disadvantaged students are inexperienced in soliciting information from adults and, therefore, simply "tune out" when information which they do not understand is presented in the classroom, this course will train a teacher in techniques for teaching a student how to ask pertinent questions that will elicit information to clear up the difficulty. Research has demonstrated that effective learning often takes place when students can be involved by asking questions, since this gives them partial control over the flow of information and, therefore, partial control of the learning process in general. The psychological nature of curiosity will be explored and ways of fostering it examined.[95,123]

28. COMPENSATORY EDUCATION EVALUATION

Material covered in this course will include explanations of the difference between research and evaluation and how they overlap; the relationship between program or teaching objectives and educational needs, and comparison of objectives with actual program outcomes; discussion of various kinds of instruments which might be used in the collection of different kinds of data relevant to evaluation; ways of treating data; interpretation of data; analysis of data in terms of program objectives as a means of building evaluation components into the general program.94

29. THE PRINCIPLES OF BEHAVIORAL CYBERNETICS APPLIED TO COMPENSATORY EDUCATION

Performance and learning are analyzed in terms of the controlled relationships between a human operator and an instrumental situation. The concept of the behaving individual as a closed-loop or cybernetic system utilizing the processes of sensory feedback in the continuous control of behavior is explored and applications of the concept to specific learning situations pertinent to compensatory education are discussed. According to behavioral cybernetics, learning as well as other aspects of behavior organization are determined primarily by the nature of the feedback-control processes available to the behaving individual. Therefore, practical experience will be gained in this course in the designing of learning situations to fit the control capabilities of the learner. Grading philosophies and examination procedures as feedback systems are also examined.75,101,121

30. TECHNIQUES IN THE ANALYSIS OF CHILD BEHAVIOR

This course will focus on the description and ecology of behavior, how to record behavior in its context, and the utilization of different instruments for describing psycho-social situations and specimens of different kinds of behavior.

31. TESTS AND MEASUREMENTS FOR DISADVANTAGED STUDENTS

This course reviews the basic theories behind testing programs and offers practical experience in selecting or devising tests designed to assist in the collection of data appropriate to a sound determination of whether or not the goals of any given part of a compensatory education program are being achieved. Students will acquire adequate knowledge for evaluating specific teaching efforts and for monitoring the teaching-learning process going on in the classroom so that modifications for improvement can be introduced at any time. The need for careful interpretation of tests results in the light of their built-in cultural biases is discussed.118,119,120

2. TECHNIQUES OF SELF-EVALUATION

This course is designed to enable teachers to analyze verbal and non-verbal feedback from students as a means of ascertaining their own effectiveness as teachers. Approaches to self-observation in the analysis of subjective feelings arising out of different situations are discussed and applied. Experience will be gained in the interpretation of feedback data, both from students and self-observation, with the aim of identifying modes of behavior that may be tried out as modifications of approaches judged to be ineffective.

3. SEMINAR AND PRACTICUM ON FAMILY RESOURCES IN COMPENSATORY EDUCATION

The school can no longer be regarded as a socializing agent independent from the families of its students or the community in which it is located. This course centers upon ways and means of identifying and utilizing family resources to assist in the educational program of disadvantaged students.111

4. SUPPLEMENTARY SERVICES IN COMPENSATORY EDUCATION

When working with severely disadvantaged populations, compensatory educational programs are not complete without supplementary services which help to fulfill more basic needs. This short course discusses various kinds of supplementary services such as provision of dental care, medical care, vitamin supplements, vaccinations, eye care, psychiatric help, and, in some cases, legal assistance. Discussions will include ways and means by which school programs can be integrated with welfare services and other kinds of assistance from community agencies.

35. PRACTICUM IN PREPARATION OF HOME ENVIRONMENTS FOR COGNITIVE STIMULATION

One of the disadvantages experienced by many students from low-income families is the discontinuity between home and school. This course provides a discussion of, and gives the student experience in, planning with parents and alteration of home environment which will help reduce discontinuity and also provide for cognitive stimulation appropriate to the development of the children living in the home. Preparing home environments is extremely important in helping students who come from backgrounds where the middle-class "hidden curriculum" does not exist and, therefore, does not provide them with experiences prerequisite to successful performance in school.[86]

36. PRACTICUM IN UTILIZATION OF NON-PROFESSIONAL PERSONNEL

As educational systems begin to differentiate their staffs, the classroom teacher will be supervising the efforts of the para-professional, the teacher aide, and other kinds of supporting personnel. This practicum focuses on ways of analyzing tasks and defining roles for the para-professional so that the teaching-learning process is maximally efficient.[84,85]

37. PRACTICUM IN THE UTILIZATION OF MEMBERS OF THE PEER GROUP AS TEACHERS AND PLANNERS

This practicum is devoted to training student teachers in the techniques of utilizing other class members as teachers and as planners of activities consistent with the basic curriculum. Research evidence indicates that peer group members used as teachers can often communicate very effectively to their peers, thereby facilitating the learning of their peers, but they themselves also improve in their knowledge and motivation. This is frequently neglected as a classroom resource which could be very effective if properly organized and utilized.[112]

38. CURRICULUM THEORY AND CURRICULUM DEVELOPMENT

This course examines the current theories in curriculum development and includes a practicum in creating curricula on different levels for a variety of purposes.[99,100,101]

39. TRAINING FOR SPECIFIC CURRICULUM AREA

Master Teachers may have one or more areas of expertise in a given curriculum area, such as language arts and reading, math, physical science, behavioral science, biological science, art, dance, music, theatre arts, literature, technology, etc. Basic training in most of these areas would be ordinarily undertaken in the appropriate department of a university or college.

40. COMPUTER AIDED INSTRUCTION FOR DISADVANTAGED STUDENTS

This course will focus on the adaptation of computer education instruction techniques for students who require compensatory education. Special units will be prepared in which the computer will be utilized in presentation of information and the explanation of any operations in utilizing the information which the student needs to know.

41. SEMINAR AND PRACTICUM IN PSYCHO-LINGUISTICS

This course will cover the basic field of psycho-linguistics including the following aspects: linguistic models and functional units of language behavior; mediation theory and grammatical behavior; grammatical models and language learning; theory and practice of verbal conditioning; covert habit systems; memory transformations of verbal units; semantic generalization; and forgetting theory. Experience will be gained in diagnosing psycho-linguistic problems and in basic research techniques related to psycholinguistics. The above list is not complete and is only meant to serve as a general indication of the contents of the core.

42. SEMINAR IN ADMINISTRATION OF COMPENSATORY EDUCATION PROGRAMS

This seminar will systematically deal with basic problems in the administration of compensatory education programs: staff selection; creating differentiated staffing patterns for large programs; pre-service and in-service training for staff; creating efficient communication channels among staff, students, community people, and parents; integration of the compensatory education program with the regular program; and ongoing modification and evaluation for improvement.

43. THE NATURE-NURTURE CONTROVERSY

This course focuses upon the relationship between this controversy and compensatory education. It will involve a review of the research literature on adopted children, studies of twins, the differences in effects of living in isolation or in institutions, and the effects of nursery-school attendance. Related animal research will be examined.[72]

44. RACE RELATIONS

Difficulties among various racial groups in American society have been perpetuated by its major institutions, including the school. This course focuses upon several aspects of race relations problems: history, the dynamics of prejudice and the psychology of attitude change, human rights and the law, and an exploration of the means by which educational institutions and teachers transmit prejudice from one generation to another through their attitudes, school policies, and learning materials. This course has a practical aspect in that every student participates in small encounter groups during which time he is afforded the opportunity to be confronted with his own attitudes and feelings about all aspects of the racial issue so that he may have a conscious knowledge of how his feelings are altering his perception. Once this process begins, attitudes are able to be modified and insights can be applied to the teaching-learning situation.

45. DESEGREGATION AND INTEGRATION: FACTORS IN COMPENSATORY EDUCATION

Students will review the literature on desegregation and integration and discuss the ways in which the institutionalization of discrimination has made compensatory education necessary as a part of the public responsibility in a modern democratic society. The effects of integration on educational progress will be examined. This course will enable candidates to experience the nature of relevance and irrelevance as it pertains to the teaching and development of materials for black students and those from other racial backgrounds, and to be able to identify either in materials, attitudes, and behavior.[126]

NOTE: The above learning experiences designate content areas and do not imply length of time required to master them. Presumably this would vary from individual to individual, depending upon background, motivation, interest, and the depth of mastery desired or required.

NOTES AND REFERENCES

1. Harrington reports 40 to 50 million people live in poverty in this country (Harrington, Michael, The Other America, Macmillan: New York, 1962). Havighurst estimates that 15% of the total child population are disadvantaged, and 30% of the school children population in the big cities. (Havighurst, Robert J., "Who Are the Socially Disadvantaged?" Journal of Negro Education, Summer, 1964.) Others place the estimate as high as 40% of the school population being in need of compensatory education.

2. See, for instance, Basil Bernstein's research on how language, as learned while growing up in the home, structures and conditions what the child learns and how he learns and particularly how this can set limits within which future learning may take place.
   Bernstein, Basil, "Social Class and Linguistic Development: A Theory of Social Learning," in Education, Economy, and Society, edited by A. H. Halsey, et.al., Glencoe, Illinois: Free Press, 1961.

3. For a more critical look at Title I, see Robert Dentler's article, "Urban Eyewash: A Review of 'Title I/Year II'" in The Urban Review, vol. 3, no. 4, February, 1969, pp. 32-33.

4. A study of 132 schools receiving Title I funds showed no improvement in achievement on the part of pupils, though again there were evaluation and data collection problems. See Mosbeck, E. J., et.al., Analyses of Compensatory Education in Five School Districts, TEMPO, General Electric Company, Santa Barbara, California, March, 1968. Report is available through the U. S. Office of Education.

5. A review of 150 Title I projects considered to be outstanding reveals the same kind of shortcoming. Though much of the learning activity may be related to aspects of becoming a competent learner, that, as a major thrust, is not present. See Profiles in Quality Education: 150 Outstanding Title I, ESEA, Projects, U. S. Office of Education (OE-37018), 1968.

Stake, R. E., and Denny, Terry, "Needed Concepts and Techniques for Utilizing More Fully the Potential of Evaluation," in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 377.

"Unfortunately, specifications which are implicit are difficult to communicate to others, they are rarely analyzed and clearly revised, and they do not serve as clear guides to particular decisions or actions. Implicit specifications may shift without the educational worker's being clearly aware of any change, and, because of poor communication, the attainment of the specifications may defy any attempt at systematic appraisal." The author continues, "If the purposes and specifications for education are not explicit, then it is possible for them to be altered by social pressures, by fads and fashions, and by new schemes and devices which may come and go with momentary shifts on the educational scene. Implicit purposes are difficult to defend, and the seeming vacuum in purpose invites attack and substitution of explicit purposes by a constant stream of pressures and pressure groups."

Excerpts are from the chapter on "Some Theoretical Issues Relating to Educational Evaluation," by Benjamin Bloom, in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 29.

The Guide to Evaluation of Title I Projects, published in October of 1966 by the U. S. Office of Education (GPO 1966 0-236-150), outlines clearly the importance of behavioral objectives and how to formulate them. See page 8.

See also "'School-centered, Waterfront, Compared-to-what?' and Other Educational Objectives," by Scarvia Anderson, in On Evaluating Title I Programs, Educational Testing Service, Princeton, 1966, pp. 23-29.

The American Institutes of Research under a contract with the National Advisory Council on Education of Disadvantaged Children compared successful and unsuccessful programs. They held that "an improvement in achievement scores was not considered sufficient by itself to identify a 'successful program.' The achieved gain had to exceed that made by a control group over a comparable period of time, or that to be expected on the basis of normative data, and had to be statistically significant." Title I - E.S.E.A: A Review and a Forward Look - 1969, Fourth Annual Report of the National Advisory Council on the Education of Disadvantaged Children, (GPO 1969 0-331-372), 1969, p. 20.

11. It is a natural sentiment to have reservations about really sound evaluation because it will reveal shortcomings and take away excuses for continuing in the same old way. Donald Campbell expresses the situation clearly: "It is one of the most characteristic aspects of the present situation that specific reforms are advocated as though they were certain to be successful. For this reason, knowing outcomes has immediate political implication. Given the inherent difficulty of making significant improvements by the means usually provided and given the discrepancy between promise and possibility, most administrators wisely prefer to limit the evaluations to those the outcomes of which they can control, particularly insofar as published outcomes or press releases are concerned. Ambiguity, lack of truly comparable comparison bases, and lack of concrete evidence all work to increase the administrator's control over what gets said, or at least to reduce the bits of criticism in the case of actual failure. There is safety under the cloak of ignorance." No doubt this statement speaks to administrators of local projects and the Title I Office in the State Department, but it is particularly true in our case, since what we advocate (especially in the section on training programs), though based on research, nonetheless has never been tried out systematically on any significant scale. Yet, it will be critically important for any such efforts to be rigorously evaluated, political vulnerability notwithstanding. See D. T. Campbell, "Reforms as Experiments," American Psychologist, vol. 24, no. 4, April, 1969, p. 409.

12. Massachusetts Evaluation Report on E.S.E.A. Title I Activities, 1968, p. 33.

13. In the section on Compensatory Education, the Willis-Harrington Report recommends that "consultant staff should be provided through the Division of Curriculum and Instruction essential to unifying, coordinating, and strengthening compensatory education programs and services." See page 44.

14. "Evaluation studies are made to provide a basis for making decisions about alternatives and, therefore, in undertaking an evaluation study, one at once addresses himself to the question of utility." For a useful discussion on the purposes of evaluation as compared to research, see John Hemphill's chapter on "The Relationship Between Research and Evaluation Studies" in the Yearbook of the National Society for the Study of Education, LXVIII, Part II, 1969, p. 189.

15. Written reports are often ineffective communicators. Translation of reports into audio-visual presentations for groups followed by discussion will usually be more effective.

16. Students are rarely recipients of evaluation feedback, yet this can produce greater involvement and commitment to program modification, particularly if they can be included in planning the changes in the program.

17. Most project personnel regarded evaluation as a year-end or end-of-program activity rather than as a process of analyzing continual feedback and then making decisions about alternative ways to improve the program while the program is still going on. Both kinds are needed. The latter has many implications for the timing and frequency of reporting.

18. In Appendix A of the Fourth Annual Report on Title I - 1969, the National Advisory Council on the Education of Disadvantaged Children presents an example of comparisons made of successful and unsuccessful programs. They conclude, tentatively, that the undoubted success of selected programs was "based chiefly on clearly defined objectives; teaching limited by these objectives; a reducation of competing stimuli; carefully trained teachers; and, a small group approach."

19. Providing rewards and incentives for model programs is consistent with the National Advisory Council's recommendation that "the U. S. Office of Education should explore both administrative and legislative means of rewarding well-designed, successful programs and providing incentives for their expansion and implementation by other schools." Page 5 of the 1969, Fourth Annual Report on Title I. See also the recommendation concerning provision of incentives by the state to school districts (Willis-Harrington Report) Quality Education for Massachusetts, The General Court of the Commonwealth of Massachusetts, 1964, page 43.

20. Suchman, Edward A., "Evaluating Education Programs," The Urban Review, vol. 3, no. 4, February, 1969, pp. 15-16. See also, by the same author, Evaluation Research: Principles and Practices in Public Service and Social Action Programs. New York: Russell Sage Foundation, 1967.

21. Reported in Title I/Year II, U. S. Office of Education, 1968, p. 43.

22. "Such programs, in our experience, have usually been planned by teachers or curriculum experts who are separated from district evaluation personnel both organizationally and philosophically." For fully developed statement, see: Hawkridge, David G., and Chalupsky, Albert B., "Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 8.

23. "The reason for the bits-and-pieces approach to the development and organization of Title I programs is that there has usually been insufficient planning in advance. This failure in planning is partly the result of knowledge of how to plan and partly the lack of time to plan." Dyer, Henry S., "Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 10.

24. See Section entitled "Setting up a planning committee," A Survey of Title I Reading Projects, p. 40, published by U.S.O.E., Division of Compensatory Education, November, 1967.

25. Although poor timing was particularly bad during the first year of Title I, the problem still continues. See section "IV.2 Time of Operation and Duration," The Impact of Title I: Assessment Program for New England, New England Educational Data Systems, December, 1967, p. 59. See also the statement of the National Advisory Council on the Education of Disadvantaged Children, p. 7, in their report to the President, January, 1968.

26. "Unfortunately, the failure to consider research and evaluation as an integral component of the educational system has resulted in a sequence of activities which virtually guarantees the equivocal findings characteristic of Title I and other compensatory educational programs... While proposals to obtain funding may have reflected contributions from trained evaluators, these good intentions have been forgotten often or severely compromised once the funds are obtained and the time comes for detailed program planning. As a consequence, non-measurable objectives went unchallenged while evaluators contented themselves with easily obtainable data of questionable relevance." See "Evaluating Educational Programs," by Hawkridge and Chalupsky, in The Urban Review, vol. 3, no. 4, February, 1969, p. 8.

27. State Department Title I Office recently held a number of conferences at which time they announced to Title I project directors and planners that they will require this kind of documentation for proposals being submitted beginning summer, 1970. Therefore, this recommendation is in the process of being implemented now.

28. Wilkerson, Doxey, "We Must Define Behavioral Goals," Report of Conferences on Improving the Education of Disadvantaged Children, U.S.O.E., 1969, p. 27.

29. Johnson, Ray A., "Writing Performance Objectives," A Guide to Evaluation: Massachusetts Information Feedback System for Vocational Education, Massachusetts Department of Education, Division of Research and Development, September, 1969, p. 23.

30. The National Council has expressed a similar concern in regard to projects throughout the country. See Report of the National Advisory Council on the Education of Disadvantaged Children, U. S. Office of Education (GPO 911-478), March, 1966, p. 17; and Fourth Annual Report of the Council, 1969, p. 43.

31. Guidelines Title I of E.S.E.A. of 1965, Department of Education, Bureau of Elementary and Secondary Education, Boston, Massachusetts, July, 1968, p. 2.

32. See memorandum from the U. S. Office of Education dated June 14, 1968, on the subject of "Misuse of Title I Funds by Supplanting State and Local Funds." A copy of this memorandum may be found in the Title I Guidelines, p. 17. (See previous reference.)

33. See Title I Guidelines, Section J on Evaluation, p. 22.

34. It should be noted that E.S.E.A. Title III (PACE) brings about $5 million into Massachusetts annually as opposed to the $16 million provided by Title I. Title III permits the State agency a much larger administrative budget (up to 5% as opposed to 1%). If Title I projects are to have well-designed evaluation programs, more staff support in this area will be needed.

35. For example, many new designs, such as the regression discontinuity design, have begun to appear, several of which should be made known and used, particularly in the case of the evaluation of model programs. See the section on Regression Discontinuity Design in the article "Reforms as Experiments," by Donald T. Campbell, published in the American Psychologist, vol. 24, no. 4, April, 1969, p. 419. This design has direct relevance to the evaluation of programs for the disadvantaged.

36. The Society for the Psychological Study of Social Issues (SPSSI) has published a special supplement, Guidelines for Testing Minority Group Children, which appears in the Journal of Social Issues, vol. XX, no. 2, 1964. It is available from SPSSI, P. O. Box 1248, Ann Arbor, Michigan. Collection and dissemination of these kinds of publications would make a good beginning. This recommendation parallels the recommendation of the National Advisory Council on the Education of Disadvantaged Children that: "Professional educators and social scientists should intensify a review of current achievement tests to further reduce 'culture bound' components that are biased against the disadvantaged child and conceal indications of his true, latent ability; and, that these professionals should also move beyond purely cognitive achievement tests and into other realms--self-concept, creativity, motivation, behavior--where compensatory education may have equally important long-range results." Fourth Annual Report of the National Advisory Council on the Education of Disadvantaged Children, Title I - E.S.E.A: A Review and a Forward Look - 1969 (GPO 0-331-373), p. 5.

37. Webb, Eugene T., et.al., Unobtrusive Measure: Nonreactive Research in the Social Sciences, Rand McNally & Company, Chicago, 1966.

38. The National Advisory Council on the Education of Disadvantaged Children has expressed concern for non-public school participation. They recommend that "the U. S. Office of Education should continue to urge the involvement of non-public school officials in the planning and evaluation of Title I programs." See whole section on "Participation of Non-public School Children," pp. 5-6 of Fourth Annual Report, Title I, 1969.

39. Cook, Desmond, Program Evaluation and Review Technique: Applications in Education, U. S. Office of Education, 1966.

40. Some writers make a useful distinction between feedback and appraisal. "The purpose of the feedback is to enable the teacher to make wise judgments about what to do next in the classroom; the purpose of the appraisal is to describe some state of need, readiness, or ability on the part of the child. These purposes are entirely different and therefore the fact that they are achieved through different procedures seems reasonable. These differences may be noted: (a) In feedback, the decision about what data to collect can be finally made only at the moment of collection, whereas, in appraisal, the decision can be made independently of the situation. (b) In feedback, the object under scrutiny is the activity of a complex system, whereas, in appraisal, it is an aspect of the personality structure of an individual. (c) In feedback, the categories must be useful to the teacher and usually will be expressed in her vocabulary, whereas, in appraisal, the categories should fit coherent theory and are often intelligible only to the researcher or some other non-participant." See Herbert A. Thelen, "The Evaluation of Group Instruction," in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 119.

41. "Title I is designed to benefit poor children. Somewhat paradoxically, however, the programs made possible by Title I are seriously challenging traditional educational practices and introducing new techniques that promise to benefit fortunate children as well. In time, the major reforms now underway in low-income schools may become accepted priorities for all schools." Title I/Year II, The Second Annual Report of Title I of the E.S.E.A. 1965, U. S. Office of Education, 1968, p. 3. For more specific details see whole section on "Catalyst for Change" from which above quote is taken.

42. Massachusetts Evaluation Report on E.S.E.A. Title I activities, Bureau of Elementary and Secondary Education, State Department of Education, December, 1968, p. 29.

43. "Cost effective analyses...are designed to measure the extent to which resources allocated to a specific objective under each of several alternatives actually contribute to accomplishing that objective, so that different ways of gaining the objective may be compared." See pp. 37-38, Budgeting for National Objectives, a Statement on National Policy by the Research and Policy Committee for Economic Development, January, 1966. See also the reference to the ABT Associates, Inc., Cost-effectiveness Model in Title I/Year II, U. S. Office of Education, 1968, p. 117.

44. For a good exposition on the application of program budgeting to the field of educational planning, see Hartley, Harry J., Educational Planning, Programming, Budgeting, Englewood Cliffs: Prentice Hall, 1968.

In listing four imperatives for schools today, the Committee for Economic Development included one on cost-effectiveness: "School systems must employ continuously the results of cost-benefit and cost-effectiveness analyses in order to allocate effectively the resources available to education and to distinguish among programs of high and low priority." (Page 13) In line with this imperative, they urged "immediate exploration by school administrators of the application of program accounting techniques in order to identify costs in school systems and to take advantage of cost comparisons. The adoption of such techniques by school districts will be advanced greatly if assistance and leadership in this area are provided by state departments of education and by university schools of business, economics, and education." Innovation in Education: New Directions for the American School, Committee for Economic Development, New York, July, 1968, p. 19.

45. The Bank Street College of Education study identifies some 10 to 12 benefits derived from having teacher aides on the staff. Most of them are related to a more effective distribution of resources and a more efficient utilization of time. Other important considerations are concerned with the capacity of the aide, particularly if he lives in the same area and/or shares a similar background to the students with whom he works, to function as a positive role model for the students and to help interpret cross-culturally attitudes and behavior both from teacher to pupil and vice versa. Bowman, Garda W., and Klopf, Gordon J., Auxiliary School Personnel: Their Roles, Training, and Institutionalization, Bank Street College of Education, October, 1966, pp. 4-5.

46. Several states, such as Illinois, Michigan, Colorado, and California have more functional definitions of the permissible roles of teacher aides which might be examined as possible models.

47. Chapter 164 of the Acts of 1965 rules that an instructional or administrative aide (as used in Section 38 of Chapter 71, which it amends) "shall be a person who does no actual teaching, but acts as an assistant to a teacher."

48. Fifty-two percent of the billion dollars provided by Title I was spent on instruction during its first year. Part of this went into the creation of 180,000 new part-time and full-time professional and sub-professional positions other than teaching. Forty-eight of the fifty-four reporting agencies (state) told of turning to salaried sub-professionals. The First Year of Title I E.S.E.A. 1965, U. S. Office of Education (GPO 1967-0-257-037), 1967, p. v and p. 9.

49. "Assignments for aides varied widely. Most frequently, aides helped prepare materials, worked with individual students and small groups, supervised class work and group games, corrected papers and performed clerical duties. Many school districts also employed aides to work with reading specialists, community workers, nurses, counselors, librarians, and other specialized personnel. During 1966-67, there were 83,500 teacher aides and 6,100 library aides working in Title I programs." Title I/Year II, U. S. Office of Education (GPO 1968-0-312-658), 1968, p. 45.

50. "Teachers' expectations are like self-fulfilling prophecies. Children will achieve what is expected of them. This was borne out by a study made in San Francisco by Prof. Robert Rosenthal of Harvard University. He told teachers that certain of their pupils had a high learning potential, even though some did not. The result was higher teacher expectation and higher pupil achievement at the end of the school year." Title I/Year II, U. S. Office of Education, 1968, p. 44.

51. The Bank Street College of Education study on auxiliary personnel found role definition and role development for aides to be an important factor in the success of programs using aides. Furthermore, training of aides specific to the tasks their roles will require were likewise found to be extremely important. Bowman, Garda W., and Klopf, Gordon J., Auxiliary School Personnel: Their Roles, Training, and Institutionalization, Bank Street College of Education, October, 1966, pp. 6 - 7.

52. See Ausubel, David P., "A Teaching Strategy for Culturally Deprived Pupils: Cognitive and Motivational Consideration," School Review, Winter, 1963.

53. A group of researchers at Arizona State University studied changes in attitudes of educators toward disadvantaged children before, during, and after special in-service training. Teachers who experienced the Title I training changed favorably toward these children while control group teachers maintained unfavorable attitudes. This is positive evidence of the worth of training geared to meet special needs. For more details, see Title I/Year II, Second Annual Report of Title I, U. S. Office of Education, 1968, p. 118.

54. The Center for the Study of Aesthetics in Education at the University of Massachusetts, Amherst, is currently engaged in the development of a curriculum which is based on art experience and its relationship to cognitive and affective growth. The Title III (PACE) program at Attleboro, Massachusetts, directed by Mr. Donald Brigham, is an outstanding example of the way in which involvement in art activities can support motivation for learning at high levels.

55. Title I - E.S.E.A: A Review and a Forward Look - 1969, Report of the National Advisory Council on the Education of Disadvantaged Children, 1969, p. 23.

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NOTES AND REFERENCES

FOR SECTION ENTITLED "MODEL PROGRAM FOR TRAINING COMPENSATORY EDUCATION PERSONNEL"

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58. It is admittedly difficult to determine when given individuals are "caught up," since, on the one hand, there may be genetic limitations in given cases which would preclude performing at levels consistent with the norm, and, on the other hand, there are undoubtedly many who, through compensatory services, might come to achieve at a level comparable to the norm, but still not be achieving at a rate commensurate with their capacities. In the former, one would be inclined to say they'd caught up if they are performing to capacity, while in the latter, one might say they had not caught up since they are still "underachieving," even though doing quite well. However, one can compare achievement levels of groups and determine whether or not the group has "caught up."

There is also the controversy over whether or not the middle-class values system which determines what constitutes the norm, should be imposed on members of any subculture. Many have expressed grave doubts that that values system, with its emphasis on materialism, "success," and technology, is even functional for the nation as a whole. This is all the more reason to have the programs focus on the development of competent learners, for they will be freer to examine any values system, make responsible choices, and help the society to change in constructive ways. In this connection, see Fantini, Mario, and Weinstein, Gerald, The Disadvantaged: Challenge to Education, Harper and Row: New York) 1968, p. 156.

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128. These characteristics are arranged roughly hierarchically, though it is not possible to maintain that "higher order" capacities do not operate simultaneously to one degree or another with lower order ones at an early age. What is needed is a multi-dimensional model of a competent learner. Verbal explanation is always linear and therefore cumbersome if not inadequate.

Elaborations on some of these characteristics can be found in Bloom's taxonomy of education objectives and in Guilford's explanation of the structure of the intellect.

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"Therefore, a gain that matches the norm is not sufficient. In order to reduce the gap between the average scores for Title I schools and those of other schools, the Title I group must achieve at a greater rate than the norm."

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DESCRIPTION OF STUDY

PURPOSE

The general objective of this study is to assist in the improvement of compensatory education programs in Massachusetts through modifications of current programs based on evaluations specific enough to permit the formulation of concrete recommendations for improvement. For planning purposes, the study was originally envisaged as a three-year program with the first year's activities being undertaken as a separate unit which could provide the basis for the research activities of the subsequent years. Obviously, it is not possible to do a thorough study, collecting comparative data by using control groups, within one year. Thus, the first year's activity was devoted to an inventory of federal, state, and local programs, an evaluation of a representative sample of programs, and the formulation of recommendations for improving evaluation, for modifying the programs themselves, and for new administrative arrangements to facilitate program improvement.

Since other projects in the State have been set up to evaluate programs of special education, such as the education of emotionally disturbed children, they did not come within the scope of this study, which is primarily concerned with educational programs dealing with deprivations arising primarily from unsatisfactory economic and social conditions. Other programs which have a direct or indirect bearing upon the effectiveness of Title I programs (such as Model Cities Programs, Foster Grandparents, Headstart, Upward Bound, Neighborhood Youth Corps, Family Planning, etc.) were not included as a part of this study, although some attention was given to how all these efforts might be better coordinated.

The Massachusetts Advisory Council on Education has already commissioned a study on counseling and guidance, therefore this area was also not included as a major focus of this study.

PROCEDURES

Sample Selection: For intensive study of compensatory education in Massachusetts, a sample was selected from Title I (Elementary and Secondary Education Act of 1965) projects since they represent the major state-wide effort to improve the learning opportunities of educationally disadvantaged children and youth.

The unit of sampling was the project, based on the latest available State Department list (1967-68). There were over 460 funded projects, of which 10% or 46 were selected for our sample. A stratified proportional sampling technique was utilized to assure representativeness of two aspects considered significant:

whether or not the projects were summer or winter; and, their census classification (SMSA--Standard Metropolitan Statistical Area) as modified by the Office of Education and applied to school districts according to the State Department of Education usage. The sample was randomly drawn within these parameters. Therefore, the 10% sample of projects chosen were theoretically representative of the total Statewide Title I program administered by the Title I Office of the State Department in size and type, and by season of the year--summer or winter.

Once the sample projects were chosen, the superintendents in whose districts the projects were operating were informed of the study and asked to participate. Two refused, one because project funds were so small that the superintendent did not feel it worth his or our time, and the other preferred to give no reasons. A third project was dropped from the study because it was not possible to collect sufficient data on it. This left us with a total of 43 projects.

Methods of Data Collection from the Sample: Each compensatory education project was visited from one to six times, with an average number of visits per project being between two and three times. Ordinarily, observers spoke first with the person or persons suggested by the superintendent. This was usually a project director or a person acting as a project director, many times including the superintendent himself. All projects were observed in operation. Data collectors visited projects in teams of two or more whenever possible in order to increase the objectivity of observation and reporting. They spoke most frequently with the project director (who very often was a principal, supervisor, superintendent, assistant superintendent, counselor, specialist, or teacher acting as director). Equal efforts were made to talk with other members of the Title I staff, particularly teachers, specialists, and teacher aides. There was less opportunity to speak with non-Title I personnel, especially in the summer.

Observers were equipped with a questionnaire and observation protocol to guide their collections of data. They were also provided with a coding sheet referring to type and source of data so that we would have on record what kinds of data were being collected and the source of them. (Please see Appendix III for information on the questionnaire and observation protocol and Appendix V for the code sheet relative to type and source of data.)

Survey: To supplement information obtained on the sample projects and to consider all possible compensatory education efforts regardless of sources of funding, survey forms were mailed to all school district superintendents in April of 1969 according to a list supplied by the State Division of Research and Development.

Two forms were used for the survey. The first requested general information on children being served by all compensatory education projects which were reported on the second form and an estimation of the total number of school aged educationally disadvantaged children and youth in the district. Opinions were also solicited as to what kinds of assistance projects would like to have from the State Department of Education and from institutions of higher learning. The second form solicited information on each project considered by that district to be compensatory in nature. The definition of compensatory education in the covering letter was taken from the Willis-Harrington Report. (Please see Appendix IV for copies of these survey instruments.)

Returns on the initial mailing were disappointing. Two follow-up requests were made, including sending out additional forms. We received responses from 173 school districts (70% of the total) representing 302 projects. Several districts responded after the announced cut-off date in September and were not included in the final analysis. Forms were sent to the four diocesan superintendents, but since only one responded, these data were not analyzed. The survey data were coded, punched on IBM cards, and analyzed separately from the sample data using a series of computer programs.

NATURE OF THE SAMPLE

Since we were faced with the problem of selecting a sample of summer and winter projects, many of which had not yet been approved or even proposed, we selected our sample from a list of previous year's projects on the assumption that most of them would probably be repeated. This procedure necessitated making substitutions in the cases of projects which were modified or dropped. Taking into consideration the substitutions that were necessary, the final sample included 18 school year (winter) projects and 25 summer ones.

The grade levels of the original sample were similar to those of the total projects in the previous year.[1] The majority of the projects served children in grades 1 through 6, including various combinations of grades within that span. There were a few ungraded projects, pre-school projects, senior high projects, and several including junior high grades.

Describing the content of the actual projects observed is a difficult task. School districts are free to title projects any way they wish and projects are often multi-dimensional. Various ways of titling projects include: by time of year (Title I Summer); by instructional method (Taped Teaching); by grade level (Pre-School); by type of child served (Aid to Underachievers); by staff utilized (Teacher Aide); or, by a catchy acronym (R.S.P.) or a nickname (Operation Bootstrap). Clearly, titles are of little use in describing the project. Also, almost every project includes more than one activity, especially in the summer.

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[1] Toward an Equal Chance--Title I, Massachusetts Department of Education, Publication No. 268.

Generally speaking, our sample seemed similar to the totality of projects for the State. There is a heavy emphasis on reading. More than 80% of the sample projects included a reading activity. This was sometimes part of a more comprehensive language arts approach or it was sometimes geared to special problems such as perceptually handicapped or non-English speaking students. Teacher aides and tutorial components were usually associated with projects with a heavy commitment to reading. Several multiple-activity projects included math and enrichment activities, while fewer included physical education and science. Two were specifically of a counseling or diagnostic nature. Two summer projects were conducted on a day-camp basis and included academic and non-academic activity. One of the projects was solely work-study, while another included vocational education. One project served a special education population.

The kind of mix reflected in our sample constitutes one of the difficulties in administering Title I projects. Each one is based on the perceived needs of local school districts and their own designs to meet those needs. Further details on the nature of the projects can be found under the sub-section on Needs and Objectives in the section on Findings and Recommendations. The list of projects in the sample may be found in Appendix II.

ANALYSIS OF THE DATA AND RECOMMENDATIONS

Findings and recommendations are organized in a form congruent with the structure of the questionnaire and observation protocol used for the evaluation of the projects in the sample. The protocol was designed to meet the needs and purposes of the study while at the same time reflecting in content a reasonably comprehensive view of the research literature on compensatory education. (A full outline and commentary on the questionnaire and observation protocol may be found in Appendix III, page 275.)

The analyses are thus organized in three parts: Part I concerns planning and evaluation procedures; Part II deals with variables which research has demonstrated to be critical to the success of compensatory education programs. Part III summarizes the analysis of the survey data.

Findings and recommendations falling within a given category are discussed in each case (Gothic type style) after a presentation of excerpts from the questionnaire and observation protocol (*Italic type style*) relevant to that category. These categories may therefore serve as a table of contents for the findings and recommendations pertinent to them:

PART I: PROJECT PLANNING, EVALUATION, AND MODIFICATION

A. Planning Procedures
B. Formulation of Project Objectives
C. Selection of Project Participants
D. Project Evaluation
E. Program Modification

PART II: PROJECT STAFFING, TRAINING, AND CURRICULUM

F. Staff Characteristics, Selection, and Recruitment
G. Pre-service and In-service Training
H. Learning How to Learn--Developing Effective Learners
I. Motivational Aspects of the Program
J. Parental, Home, and Community Involvement

PART III: SUMMARY OF FINDINGS FROM ANALYSIS OF SURVEY DATA

Data from School Districts
Data on Projects Within Districts
Cross Tabulations

PART I: PROJECT PLANNING, EVALUATION, AND MODIFICATION

A. PLANNING PROCEDURES

1. WHO WAS INVOLVED IN THE PLANNING PROCESS?

Since evaluation is based on a determination of how well efforts are achieving objectives, judgments about the quality of a project's evaluation activities will depend, at least in part, on what objectives were adopted and how they were formulated as part of the planning process. Thus, information was gathered on all aspects of project planning.

We were interested in finding out how extensive were the personnel resources used in planning; where the executive power in making planning decisions was located; to what extent universities and colleges were involved in planning; whether or not Title I students and Title I parents had a say in the planning of projects which will affect them; and, to what extent the school assumed leadership in cooperative planning with other agencies which might be pertinent to the achievement of project objectives, such as Community Action Agencies, welfare agencies, Public Health Service agencies, etc.

In examining who was involved in the planning process, we found that administrative personnel were largely responsible for the planning of this year's Title I projects: superintendents, principals, superintendents' staffs, project directors, and supervisors accounted for over half of the categories of persons mentioned as being involved in planning (55 out of 96 people in 43 projects). Teachers accounted for less than 1/5 of the planning staff positions represented (18 out of 96 people involved in the planning of 43 projects). Counseling and guidance positions were ranked next in frequency (10 out of 96 in 43 projects). No other grouping was mentioned more than twice. Personnel mentioned once or twice included remedial reading specialists, psychologists, CAP directors, medical personnel, social workers, parochial school or church personnel, and students. Parents were never mentioned in response to this question. Community Action Agency and parochial school officials were mentioned only twice each, even though their involvement is supposedly imperative by law.

It is important to note that these responses reflect the actual categories of persons mentioned by those running the Title I projects as planners. We may therefore suppose that these are the decision makers, and though others may have been included in formal lists, etc., their influence was not recognized or decisive.

As for university planning and participation, we found that 35 out of 43 projects (81%) did not receive any university or college support in planning or implementing their projects. Of those who did, six specific kinds of assistance were used by seven projects. They are as follows:

1. Consultants in testing and diagnosis
2. Providing workshops for teachers as pre-service training
3. Research (graduate student)
4. Consultant for evaluation
5. Resource for planning ideas
6. In-service training

Only one of the 35 projects responding "yes" to the question of university participation in planning used university personnel for input to the total project, including involvement in planning, materials selection, training of personnel, and evaluation. It should be noted here that many public school people felt that university personnel were often not qualified to provide the kind of expertise needed for much of the planning. The fact that there is such a shortage of well-trained personnel in compensatory education is the most striking evidence that universities are not meeting compensatory education manpower needs, possibly because they, too, lack personnel trained in this area. In any case, university people who are not involved on a day to day basis with the educational problems facing disadvantaged youth and those teaching them are not very likely to be effective in helping local school districts plan and implement programs for the disadvantaged. The converse is probably more likely to be the case: that public school personnel will be able to help universities set up programs of preservice training for students preparing to specialize in some aspect of compensatory education. Doing something about this manpower shortage is largely a matter of establishing more effective teamwork between universities and the public school system.

Only 9 districts were identified as having taken leadership in cooperative planning with other agencies. Even this figure may be inflated because it appears that schools often tell other groups of their plans and seek their approval without involving them in cooperative planning efforts.

The only organizations mentioned more than once as being involved cooperatively in planning were Community Action Agencies which appeared as responses from 3 out of 35 of the projects of the sample from which data were available. Considering the overlapping target populations of Title I and Community Action Programs and the fact that Title I legislation gives recognition to CAP agencies, this finding is disappointing.

Active participation of members of community agencies and organizations helps to create a stake in the program's success and often results in being able to mobilize volunteer help in getting the program underway or assistance in carrying out special activities which need additional help during the course of the project. Lack of awareness of this value of involving members of other agencies can result in oversights that may reduce the effectiveness of the program. For instance, one reading program had hoped to use the library as a part of the project's activity. However, this aspect of the program had to be abandoned because of a scheduling conflict with the library. On checking, it was found that the town librarian was not included in the planning.

Only 3 projects out of 36 from which data were available actively included students in the planning of their projects in the following ways:

> T-group type sessions within the project (11th & 12th graders);
>
> Secondary level students helped to plan the work-study aspect of a project; and,
> Director discussed felt needs with target area students.

Only active participation in actual planning was recorded as constituting a positive response. A student having freedom to go or not to go to a planned activity was not considered as an example of active participation. Several schools mentioned using student evaluation in replanning.

It is recognized that in the case of very young elementary school children, it might not be suitable or feasible to have students participate in planning. However, given the trends in changing attitudes and the increasing emphasis on democratic processes in education, it seems important that students be given a stake in the enterprise. Involvement would extend from yearly planning to periodic evaluation, and include meeting to assist in planning daily activities. The absence of student involvement was especially surprising in summer programs where attendance was voluntary.

2. HOW WERE THE STUDENT NEEDS ON WHICH THE PROJECT WAS BASED DETERMINED?

Of particular concern here was information on the actual needs, how they were identified, and whether or not and how priorities among the needs were determined.

Needs as determined by planners of projects in the sample seemed to show little change from those that were typical of Title I when it first started. There is little evidence that there is any systematic review of needs. Project planners' and staff members' opinions seemed to be the determining factor regarding the identification of needs (over 1/3 of all responses from 38 projects from which data were available).

Sometimes needs were obvious as in the case of students not being able to speak English. Otherwise they were based on opinions of staff members, or, in some cases on assessment of specialists, test scorers, being below grade level in a given subject matter, or having failed a previous grade. As can be seen from the above, there was a tendency to state symptoms of conditions which probably represented unfulfilled needs, rather than needs themselves (i.e., failing a previous grade is not a need, it is symptomatic of a variety of unmet needs, some or many of which may be more pertinent to the school system than the child). In short, program planners adopted no systematic means of identifying needs.

As far as determining priorities was concerned, only one need was listed by 10 projects out of 33 for which data were available; therefore, priorities were of no concern to these projects. In 11 projects, priorities were determined by an administrative decision with no basis given. In 4 projects the priority decisions were considered intuitive, i.e., determination was based on the feelings and general knowledge of the staff. Other responses occurring twice included teachers' observations, testing within a designated area, and convenience or practicality.

We collected information on the three needs which project personnel felt to be most outstanding in rank order. In both summer and winter projects reading improvement was mentioned as the highest ranking need. It also received the highest count across all three needs, i.e., it was the most frequently mentioned need when categories of needs were tabulated without regard to rank.[1]

The second most frequently mentioned need was improvement of self-image. While it was not ranked first place as often as reading improvement, it appeared almost as frequently when categories were totalled without regard to rank.

The next most frequently mentioned needs, occurring only half as often as the above two needs, in rank order were:

Improvement of attitude toward school
Cultural enrichment and broadened experience
Language skills

All of the above have obvious connections with the two most frequently mentioned needs, improvement of reading and self-image.

Need for enrichment and improvement of attitude toward school were more frequently listed as needs in summer projects than in winter projects.

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[1] Most states ranked improvement in reading as the major need. See Section II, "How the States Identified and Met Children's Needs," p. 40, The States Report: The First Year of Title I, HEW, USOE, 1967, available from U. S. Government Printing Office.

No other need was mentioned more than three times. Others listed were:

Individual help and attention
Challenging curriculum
Remediation of perceptual handicaps
Learning how to speak English
Decreasing the drop-out rate
Working with mental retardation
Improvement of performance on standardized tests
Math skills improvement
Social adjustment
Improved racial balance
Health education

(See Appendix VI, page 306, for tabulation.)

There are many more needs than Title I can or is designed to meet in any given locality. There are also alternate methods of meeting these needs. It is apparent that need priorities should be determined in a more systematic way. Even though at times an answer thus derived would be the same as an intuitive judgment, the process of determining needs in a systematic way would serve to clarify the project purpose and present a clear beginning or re-cycling point in the total planning-evaluation process.

3. HOW MUCH TIME WAS THERE FOR PLANNING?

Exploration of this question included gathering data on the amount of time between the planning and the start of the project. The time factor has obvious implications for program quality.

There was such a wide variety of responses to this inquiry that no discernible pattern emerged. A few projects (3) had only one or two weeks between planning and the start of the project. One had been rejected by the State Department and needed to replan. Another was waiting for funding notice. On the average, there was between one and two months of time lapsing between planning and the start of the project. One project indicated that planning was ongoing throughout the year. Only 4 had planned 4 or more months before the start of the project. Several projects mentioned hand-carrying proposals to Boston because of the time pressure and the desire to avoid crippling delays. (See Appendix VI, page 307, for tabulation.)

Since school districts cannot hire personnel or order materials until the money for the project is actually allocated, and since there needs to be considerable lead time in order to do this properly, some provision needs to be made to improve the pacing of planning, submission of proposal, approval of proposal, and start of the program. Basically, this is a problem stemming from Congressional appropriation schedules which are not congruent with any reasonable planning schedule for school systems.

Less than one-quarter of the winter projects mentioned replanning at the end of the project for the next year. Only one summer project indicated that they replanned right after the summer experience. It would seem that given four years of experience with Title I, local school districts could do a major portion of the planning without having to determine absolute dollar amounts needed and other administrative details. Needs, objectives, methodology, evaluation, and other aspects of planning could be started much earlier than currently appears to be the practice.

4. IS THIS YEAR'S PROGRAM A REPEAT OF LAST YEAR'S PROGRAM?

This question was extended into a consideration of the rationale for repeating or not repeating a project, ascertaining what kinds of revisions had been made and on what basis, and whether or not the previous fiscal year's project evaluation was used in making a decision about whether or not to repeat the project or to make revisions.

Most of both the summer and winter projects were repetitions of last year's projects, excluding minor revisions. Only five projects out of our sample of 43 had new programs this year.

On inquiring into the rationale behind repeating a project, we found that the major reason for the decision to repeat or not to repeat was based on people's intuitive feeling that it was a good program. The usual response was "we felt it to be a successful program." Continued need was mentioned three times as a rationale for repeating a project. No other answer was mentioned more than twice. These included:

Not enough progress to drop it yet
Standardized testing showed gains
It permits teachers to continue their experience
Favorable reactions from students, parents, and teachers

Of those who decided not to repeat, the reasons were:

The project was not successful
The project was used to "seed" new projects within the district and these have now been initiated
Informal recommendations from staff members to discontinue

There seems to be considerable habitual repetition of something once it is started based upon purely subjective notions. A repeated project should require as much or more justification than a new one and should be backed up by a positive evaluation.

Out of 33 projects for which data were available, nine had made no revisions. Twice as many winter projects as summer projects made no revisions. It appears that winter projects tend to be less flexible than summer projects, probably for the obvious reason that in the summer the regular school is not going on and flexibility is more easily achieved.

Changes in six of the projects concerned personnel, either in changing a specific person or changing of position. Five summer projects and one winter project became more diversified in services or program components. No other change was cited more than twice and included:

- Service to more grade levels
- Fewer subjects included
- More staff involvement in decision making relevant to the project
- Utilization of a different selection process
- Change in the curriculum
- Addition of teacher aides
- Serving of fewer grade levels
- Change in whether or not testing was used

(See Appendix VI, page 308, for data summary.)

Only six of the 33 projects indicated that they had made some use of the previous fiscal year's evaluation in introducing modification. (See Section E, Program Modification, page for additional information.)

5. *WHAT PLANS WERE MADE FOR IN-SERVICE TRAINING?*

In some cases in-service training is regarded as a project activity which therefore needs some careful planning. We were interested in finding out how the in-service training as a project activity was planned, who was involved in the planning, and how the in-service training related to project objectives. (See Section B for information on project objectives.)

Twenty-five out of 40 projects for which data were available had no planned pre- or in-service training. Planned activity was mentioned by the remaining 15 projects with the indication that it was planned by the director, in some cases in collaboration with a specialist or consultant.

Generally speaking, plans for training were of two types: (1) training for project staff generally, or (2) training related to specific problems encountered within the project.

Five projects mentioned that the planning for pre- and in-service training took place through weekly staff meetings. By and large these were informal sessions, not part of the formal planning process. Since this is the typical school practice in any program, there is probably more of this than was mentioned. Other projects mentioned planning for orienting parents on what the project aimed to achieve and how parents could be supportive; plans for training personnel on testing; and training by a book publisher on use of supporting materials. (See Section G, Part II, page 217, for discussion on the actual pre-service and in-service training aspects of projects in the sample.)

In any case, it appears that the planning for both pre- and in-service training of staff on the whole was not a very prominent part of the planning process and that where it did occur, it often did not have a focus congruent with specific project objectives.

6. *DID THE PROJECT PLANNERS DETERMINE THE EVALUATION PROCEDURES?*

> *Since the evaluation aspects of many educational projects are added after the planning has been carried out, and in some cases even after the program has been implemented, we were interested in the vital question of the relationship between planning and evaluation and to determine the degree to which evaluation was present in the minds of those who actually planned the project.*

In reply to this question we found that in 29 projects out of the 33 from which data were available, project planners were also responsible for the planning of the evaluation procedures. This turned out to be the case in spite of the fact that most planning groups did not include members who had expertise in developing sound evaluation procedures. This finding has clear implications for training personnel in evaluation. Administrators who plan the evaluation of their projects need specific training in evaluation sufficient enough to provide this expertise or develop enough knowledge about it to recognize the need for hiring well-trained evaluation personnel to assist in the planning. (See Recommendation in Section D, page 186.)

7. *WERE THERE ANY THEORETICAL FOUNDATIONS TO THE PLANNING?*

> *Since so many programs come into being with no regard to research findings or useful theory, we were interested in ascertaining the extent to which Title I program planners adopted any predetermined theoretical*

basis for making planning decisions. For instance, special attention was given to whether or not the planners decided to have a structured or unstructured program based on some theoretical orientation to this question.

Over half of the projects (24 out of the 37 projects for which data were available) cited no theoretical basis for the planning of the project. Twenty-nine projects out of 42 considered their project to be structured; six considered their projects unstructured; while six felt theirs combined both. One project mentioned the transition during the project from structured to unstructured approaches. Structure here was intended to refer to the student's situation. It was often noted that the project was fairly unstructured for teachers, especially in the summer, while still being fairly structured for students. Smaller groups gave the teachers more freedom to prescribe different activities according to students' needs. Observers commented that children sometimes had more freedom in Title I classes than in regular classrooms but still have little choice or decision in their activities. Even summer programs generally followed relatively precise schedules. Generally speaking, projects were either structured or unstructured depending upon the experience and preferences of project personnel rather than upon any consciously accepted theoretical basis. (See Appendix VI, page 309, for data summary.)

RECOMMENDATIONS

There are several partners which must join hands in providing effective compensatory educational services for disadvantaged youngsters: the youngsters themselves and their parents; school personnel; and, representatives of the community and its agencies and institutions. The more involved all members of the partnership are in the conception of programs, the better the programs are likely to be, not only because there will be many useful perspectives on needs and objectives forthcoming from a team effort, but also because participation in the creation of something tends to inspire commitment and support for it.[1] We therefore recommend:

(1) THAT LOCAL SCHOOL DISTRICTS BE ENCOURAGED THROUGH WHATEVER APPROPRIATE MEANS TO DEVELOP MORE BALANCED PLANNING COMMITTEES WHICH WILL INCLUDE TEACHERS, SPECIALISTS, PARENTS, COMMUNITY REPRESENTATIVES, STUDENTS, AND EVALUATORS (BOTH LOCAL AND FROM THE STATE DEPARTMENT).

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[1] "Such programs, in our experience, have usually been planned by teachers or curriculum experts who are separated from district evaluation personnel both organizationally and philosophically." For fully developed statement, see: Hawkridge, D.G., & Chalupsky, A.,

"Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 8.

However, such team effort takes more time and, as our data show, this is often not available because of unrealistic deadlines for submitting proposals and lack of release time from other responsibilities on the part of school personnel.[1,2] We recommend:

(2) THAT THE STATE DEPARTMENT OF EDUCATION, TITLE I OFFICE, STUDY THE PACING OF EVENTS STARTING FROM THE INITIAL PLANNING TO THE BEGINNING OF THE PROJECT AND THAT ON THE BASIS OF THAT STUDY NEW DEADLINES BE ESTABLISHED FOR (a) SUBMISSION OF PROPOSALS OR PROSPECTUSES AND (b) REVIEW AND APPROVAL/DISAPPROVAL OF PROPOSALS SO THAT ADEQUATE LEAD-TIME CAN BE MADE AVAILABLE FOR:

1. PROGRAM PLANNING INVOLVING COMMUNITY MEMBERS AND PARENTS
2. PERSONNEL SELECTION AND RECRUITMENT
3. PRE-SERVICE TRAINING, AND
4. ORDERING OF SUPPLIES AND EQUIPMENT AND ARRANGING FIELD TRIPS.

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[1] "The reason for the bits-and-pieces approach to the development and organization of Title I programs is that there has usually been insufficient planning in advance. This failure in planning is partly the result of knowledge of how to plan and partly the lack of time to plan."

Dyer, Henry S., "Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 10.

[2] See section entitled "Setting up a planning committee," A Survey of Title I Reading Projects, p. 40, published by U.S.O.E., Division of Compensatory Education, November, 1967.

IF A GIVEN SCHOOL SYSTEM WANTS TO RADICALLY CHANGE ITS PROGRAM, WE SUGGEST THAT THE TITLE I OFFICE CONSIDER INITIATING A PRE-PROPOSAL REVIEW TO AVOID LAST MINUTE REJECTION.

(See Recommendation 27, page 215, concerning release time.)

Many of the deadlines are somewhat inflexible and badly timed due to Congressional appropriation schedules. This has been documented by any number of studies and represents a serious obstacle to effective program planning and administration.[1] We therefore recommend:

(3) THAT THE STATE DEPARTMENT OF EDUCATION DETERMINE THE OPTIMUM TIME(S) FOR RECEIVING MONIES FROM THE U. S. OFFICE OF EDUCATION AND PRESS FOR A REVISION IN U.S.O.E. POLICY THROUGH EVERY AVAILABLE CHANNEL USING EVERY AVAILABLE MEANS.

When pre-service or in-service training is not carefully planned, it tends to be taken over by a concern for administrative details or specific problems as perceived by the staff. If training is related only to problems as they arise, very often important aspects of training are neglected and if it is too informal, it tends not to be conducive to a disciplined inquiry and acquisition of important knowledge. With the wealth of knowledge accumulating in the area of compensatory education, all teachers should be exposed to it. Although independent study should not be discouraged, there are advantages to a well planned training program characterized by extensive interaction among staff members. It helps to achieve a cohesiveness and integrity of the project when it is operational, and particularly so when staff members are directly involved in the planning of their own pre-service and in-service training. For these reasons we recommend:

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[1] Although poor timing was particularly bad during the first year of Title I, the problem still continues. See section "IV.2 Time of Operation and Duration," The Impact of Title I: Assessment Program for New England, New England Educational Data Systems, Dec., 1967, p. 59

(4) THAT PRE-SERVICE AND IN-SERVICE TRAINING BE CONSIDERED AN INTEGRAL PART OF EACH PROJECT WHICH REQUIRES CAREFUL PLANNING CONSISTENT WITH THE CURRICULUM FOR STUDENTS, THE OBJECTIVES OF THE PROJECT, AND THE TRAINING NEEDS OF THE STAFF.

Good programs depend on good planning and good planning involves identification of needs and setting priorities. Our data indicate that more attention should be given to this aspect of planning. Our recommendation is:

(5) THAT THE STATE DEPARTMENT PROVIDE SOME SPECIFIC GUIDELINES AND SUGGESTIONS FOR PROJECTS TO FOLLOW IN IDENTIFYING NEEDS AND SETTING UP THEIR OWN PRIORITIES.

Deciding how specific needs are to be met constitutes one of the greatest challenges in planning. Without the assistance of theories concerning learning and the problems faced by the disadvantaged--theories which research has begun to demonstrate as useful and productive, programs can be planned on a trial and error basis only; and, if evaluation is inadequate, errors can never be identified. Project data show a real lack of the use of theory in planning. (Please see Part II, Sections H and I, for full discussion on the issue.) We therefore recommend:

(6) THAT TITLE I PROGRAM PLANNERS BE ENCOURAGED TO IDENTIFY AND DOCUMENT A THEORETICAL BASIS FOR THE PROJECT CONTENT AND METHOD AS PART OF THEIR PROPOSALS.

In many cases, planning took little effort because the project was being repeated. Further, our data indicate that usually there was no justification, based on the project's demonstrated efficacy, for repeating it. Under this arrangement, ineffective, useless, or even harmful elements of projects may be repeated. Even if a given activity is just useless in itself, it is still harmful because it takes the child away from the regular classroom where he would be learning something.[1] We therefore recommend:

(7) THAT THE STATE DEPARTMENT TITLE I OFFICE REQUIRE DOCUMENTATION FROM SOUND EVALUATION PROCEDURES THAT THE PREVIOUS YEAR'S PROJECT HAS BEEN SUCCESSFUL OR SHOWN SUBSTANTIAL PROGRESS BEFORE APPROVAL FOR REPETITION OF THE PROJECT IS GRANTED.[2]

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[1] "Unfortunately, the failure to consider research and evaluation as an integral component of the educational system has resulted in a sequence of activities which virtually guarantees the equivocal findings characteristic of Title I and other compensatory educational programs... While proposals to obtain funding may have reflected contributions from trained evaluators, these good intentions have been forgotten often or severely compromised once the funds are obtained and the time comes for detailed program planning. As a consequence, non-measurable objectives went unchallenged while evaluators contented themselves with easily obtainable data of questionable relevance." See "Evaluating Educational Programs," by Hawkridge and Chalupsky, in The Urban Review, vol. 3, no. 4, February, 1969, p. 8.

[2] State Department Title I Office recently held a number of conferences at which time they announced to Title I project directors and planners that they will require this kind of documentation for proposals being submitted beginning summer, 1970. Therefore, this recommendation is in the process of being implemented now.

B. FORMULATION OF PROJECT OBJECTIVES

8. *HAVE PROJECT OBJECTIVES BEEN DEFINED IN BEHAVIORAL TERMS?*

Since one of the perennial difficulties in evaluating programs is related to the fact that objectives are not stated in any measurable form, we were interested in finding out to what extent project planners were able to form their objectives in precise enough terms to permit adequate evaluation. We were also interested in ascertaining whether or not success criteria were established for individual students and for the project as a whole and whether or not degrees of accomplishment or outcomes were specified for each of the objectives (so that project administrators might know the extent to which they were approximating their goals).

In general, project objectives were not defined in behavioral terms. Occasionally a specific behavior would be mentioned and a degree of accomplishment would be vaguely noted.[1] In one case, where objectives were well-stated in behavioral terms, it turned out that the teachers did not understand behavioral objectives and had not used them in the actual classroom program as a means of understanding how well they were achieving their goals. Thirty-seven of the projects out of the 40 reporting indicated that they did not state the objectives of their project in behavioral terms. Even in the case of the 3 who felt that they had specified objectives in behavioral terms, they frequently did not meet the criteria which we established as a means of judging whether or not objectives were in fact defined in behavioral terms (namely, that specific behaviors were noted, under what conditions or circumstances these behaviors were to be expected, and to what degree).[1] Only two of the projects specified degrees of accomplishment for their objectives. Some projects indicated that students should get to

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[1] This finding has been found in reports on compensatory education programs throughout the country. For example, Wilkerson states: "I have been involved in the evaluation of Title I programs in New York City, and am impressed with the vague and imprecise manner in which the project objectives are defined. We read, for example, that a project's purpose is to provide tutorial service for children on the secondary school level... What I am suggesting is that many of our programs tend to define their objectives in rather general, sometimes procedural ways, rather than in terms of the behaviors they hope to achieve so far as the learners are concerned. If we could get into the practice of defining always what our programs seek to accomplish

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in terms of the behaviors of learners, not only would this help guide us to appropriate instructional methods and materials, it would also give us criteria by which to measure our success."

Wilkerson, Doxey, "We Must Define Behavioral Goals," Report of Conferences on Improving the Education of Disadvantaged Children, U. S. Office of Education, 1969, p. 27.

[1] Johnson, Ray A., "Writing Performance Objectives," A Guide to Evaluation: Massachusetts Information Feedback System for Vocational Education, Massachusetts Department of Education, September, 1969.

grade level on a specific or on a general classroom performance basis, but the objectives did not show how the teachers would be able to tell whether or not it had been done.

Observers reported a feeling of reluctance on the part of project staff members to accept the idea of pre-determining what to expect from the children. In some cases it seemed as if project staff members felt uncomfortable about the possibility of failing to achieve objectives and therefore the thought of setting specific objectives was disturbing.

Five summer projects and nine winter projects reported some kind of success criteria for students. Generally speaking, these criteria were vague and centered on the child reaching grade level. In only one or two cases did the criteria seem to be written down anywhere, and in most cases they were the director's personal "ideas" about a successful student rather than any well-defined concept of achievement which had been communicated to the staff. Fewer projects (2 summer and 4 winter) had specified success criteria for the project as a whole and even these tended to be somewhat vague. In general, projects were not seen as entities for which success measures might be developed that would enable the total program to be evaluated as a program differentiated from achievements of individual children.

9. WHAT RELATIONSHIP DID PROJECT OBJECTIVES HAVE TO ASSESSED NEEDS?

> *Obviously, if a program is going to fulfill actual needs, project objectives should be based upon a careful assessment of needs. We were interested in determining how well organized the planning procedure was and the extent to which objectives were relevant because they bore a direct relationship to assessed needs. We were also interested to note whether or not project planners considered when they formulated objectives the fact that most Title I pupils are behind when they enter the project and that they have to achieve at a rate* above *the norm if they are to catch up.*

Reading or language and verbal skill development objectives were usually mentioned among those objectives considered to be among the top three in rank; objectives pertaining to the improvement of self-image ranked second place in importance, while change in attitude toward school ranked in third place.[1] Generally speaking, project objectives were congruent with identified needs. Frequently projects had listed more objectives than needs. The informally stated objectives frequently did not correlate with the first mentioned objectives. For instance, observers frequently heard statements such as "yes, we teach reading, but what we're really trying to do is give these kids a better self-image and make them like school more."

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[1] Our findings closely parallel those reported in the State Department report on Title I in 1968.

Massachusetts Department of Education, Bureau of Elementary and Secondary Education, Massachusetts Evaluation Report on E.S.E.A. Title I Activities, December, 1968.

They are also consistent with findings of a national survey taken during the first year of Title I in which 75% of the projects were found to be concerned with reading and language skills.

Report of the National Advisory Council on the Education of Disadvantaged Children, U. S. Office of Education, GPO 911-478, March, 1966.

Of 25 projects from which data were available, five indicated their awareness of the need for disadvantaged children to learn at a rate above the norm. In four of these projects, this was stated as one of the main objectives. In two projects, it was reported that only a normal gain could be expected and therefore nothing beyond this could be adopted as an objective.

10. WAS THERE AGREEMENT AND UNDERSTANDING ON PROJECT OBJECTIVES AMONG STAFF MEMBERS?

One of the common causes of organizational ineffectiveness is the fact that many people in the organization have no conscious notion of the objectives of the organization of which they are a part. Observers interviewed to find out the extent to which project staff understood the project's objectives and agreed with them and the degree to which staff members maintained a common implementational commitment to the priority of objectives.

Eleven winter projects and ten summer projects indicated that the staff was in basic agreement with the objectives of the project and that they were understood. Observers noted, however, that people generally agreed that reading, math, etc., must be the main focus of the project if it were a reading-math project, but that they had no concept of the overall scope of objectives. Most teachers reported that they had never seen objectives written down or heard them discussed at length during meetings. For instance, directors frequently reported to observers how important the improvement of self-image was, while the teachers would be talking primarily about reading and give no indication that improvement of self-image was actually pursued as an important part of the curriculum. (See Appendix VI, page 310, for data summary.)

RECOMMENDATION

In education everywhere there is evidence of a distinction between what educators say they propose to do and what they find themselves doing. In compensatory education this is particularly true (largely because we have a better notion of what we want to achieve than how to achieve it). This is not a matter of willful deception, but a problem of inadequate attention to the evaluation process as it relates to objectives and priorities within objectives.

Stake and Denny have expressed it succinctly:

> Not only must the evaluator report the goals but he must indicate the relative importance of the goals. Goals are not equally desirable; some have priority over others. Different educators will set different priorities, and the same educator will change his priorities over time. Priorities are complex and elusive, but the evaluation responsibility includes the job of representing them. New conceptualizations and new scaling techniques are needed to take a first step toward discharging this responsibility.
>
> The great weakness in our present representation of goals is that it does not guide the allocation of resources. Goals compete for our support, for our efforts. Relying on some explicit or implicit priority system, those who administer education decide among alternative investments, operational expenditures, and insurances. Evaluation requires an acknowledgement of priorities.[1]

Not only do the priorities need to be clear, but the objectives need to be explicit and operational. Otherwise, they cannot be communicated, will be useless as a guide, and can easily

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[1] Stake, R. E., and Denny, Terry, "Needed Concepts and Techniques for Utilizing More Fully the Potential of Evaluation," in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 377.

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be changed without being noticed.[1,2,3] Our findings clearly indicate the need to implement the recommendation:

(8) THAT THE STATE DEPARTMENT TITLE I OFFICE PUBLISH GUIDELINES ON FORMULATION OF PROGRAM OBJECTIVES

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[1] "Unfortunately, specifications which are implicit are difficult to communicate to others, they are rarely analyzed and clearly revised, and they do not serve as clear guides to particular decisions or actions. Implicit specifications may shift without the educational worker's being clearly aware of any change, and, because of poor communication, the attainment of the specifications may defy any attempt at systematic appraisal." The author continues, "If the purposes and specifications for education are not explicit, then it is possible for them to be altered by social pressures, by fads and fashions, and by new schemes and devices which may come and go with momentary shifts on the educational scene. Implicit purposes are difficult to defend, and the seeming vacuum in purpose invites attack and substitution of explicit purposes by a constant stream of pressures and pressure groups."

Excerpts are from the chapter on "Some Theoretical Issues Relating to Educational Evaluation," by Benjamin Bloom, in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 29.

[2] The Guide to Evaluation of Title I Projects, published in October of 1966 by the U. S. Office of Education (GPO 1966 0-236-150), outlines clearly the importance of behavioral objectives and how to formulate them. See page 8.

[3] See also "'School-centered, Waterfront, Compared-to-what?' and Other Educational Objectives," by Scarvia Anderson, in On Evaluating Title I Programs, Educational Testing Service, Princeton, 1966, pp. 23-29.

WHICH WILL INCLUDE AN ELABORATION ON THE FOLLOWING SUGGESTIONS:

1. OBJECTIVES SHOULD BE GENERATED OUT OF ASSESSED NEEDS AND BE FEASIBLE IN TERMS OF RESOURCES AVAILABLE
2. OBJECTIVES SHOULD REFLECT A HIERARCHY OF PRIORITIES SO THAT RESOURCES, TIME, AND PERSONNEL CAN BE ALLOTTED ACCORDINGLY
3. PROGRAM OBJECTIVES SHOULD BE CLEARLY STATED IN BEHAVIORAL TERMS THAT ESTABLISH PERFORMANCE CRITERIA FOR STUDENTS AND SPECIFIC SUCCESS CRITERIA FOR THE PROGRAM
4. PROGRAM OBJECTIVES SHOULD BE DISSEMINATED TO ALL STAFF MEMBERS AND BE INCLUDED AS A PART OF THEIR PRE-SERVICE AND IN-SERVICE TRAINING SO THAT EVERYONE KNOWS HOW HE IS RELATED TO THE ACHIEVEMENT OF THE OBJECTIVES

C. SELECTION OF PROJECT PARTICIPANTS

11. WHAT CRITERIA WERE USED TO SELECT STUDENTS FOR TITLE I PROJECTS?

Title I legislation is geared for a particular target population, namely those who are disadvantaged.

> *The purpose of this question was to determine to what extent and in what ways projects identified members of the target population and to see to what extent different projects reflect similar or dissimilar notions of the kinds of students who should be in Title I programs. Obviously, project objectives and plans should be geared to meet the needs of this population.*

A wide variety of responses were recorded on how children were selected to participate in Title I programs. Three types of responses were recorded, those referring to:

1. Method of identification;
2. Qualifications or priority characteristics; and,
3. Actual criteria.

The latter category includes only those characteristics of students which are necessary or sufficient for admission into the project.

In most projects for which information was available, the teacher took part in identifying the children, either alone or in collaboration with other staff members, such as a school psychologist or reading specialist. Referrals from professionals outside the school system were relatively uncommon, occurring in several summer projects and one winter project. In over half of the projects children were chosen partially or wholly because of poor classroom performance or low achievement test scores.

Low economic status was listed as a necessary qualification by several of the projects. In addition, this was a priority for two out of 14 summer projects for which data were available. Another way of viewing this qualification was to accept students attending a target school. This was, in fact, done by three summer projects and was a priority consideration for one other. One of the winter projects considered only emotionally stable youngsters and one took only those with I.Q.'s over 110. Two projects chose only students of mediocre I.Q. while one took only those whose achievement test scores were not high. One summer program gave priority to previous participants in the program while another did so to children of large or one-parent families. In two of the projects balance was a factor in selection. For instance, students of a particular sex were selected to create a male-female balance. In one project, a small number of normal achievers were selected to have some kind of balance between underachievers and average achievers.

Two of the summer projects were open to any who wished to come and therefore functioned very much as an ordinary summer school might function. For two winter projects and nine summer ones, no necessary and sufficient criteria were listed. Ten projects named poor classroom performance as an admission criterion while 14 projects gave low scores on achievement tests as a criterion. Eight projects required a specific need for the service offered. One project was for mentally retarded and physically handicapped children. Other projects were limited to those who were considered underachievers and some were limited to those who were non-English speakers.

Some of the above responses seemed to indicate questionable standards of selection from a legal point of view: low economic status was a necessary qualification for two of the projects; two other projects were open to all who wished to come; and, one only accepted children whose I.Q. scores were 110 or better.

Given the degree of teacher influence on selection, it is important to note that having found a lack of communication of explicit project objectives to project staff, it is questionable whether or not the regular classroom teacher is informed well enough for making recommendations to the programs. Frequently the criteria for selection were not explicit, which is not surprising given the generality of objectives. For example, one project in the sample was having difficulties because the persons making referrals to the program did not understand the project's objectives. This project's objective was to bring children up to grade level and return them to the regular classrooms as soon as possible. However, because there were no special education classes in the community, some teachers selected slow and retarded children as the most disadvantaged group elegible to receive special help from the Title I project. The situation led to a frustration of the staff and students and lack of understanding and support from the community. Given this particular group of children, the objectives were unrealistic. Obviously, in this case selection criteria and objectives were not coordinated, but detrimental to all concerned. (See Appendix VI, pages 311-314.

12. WHAT WERE THE DIAGNOSTIC MEASURES TAKEN, IF ANY?

Diagnostic measures are important in assessing needs and therefore useful in determining program objectives and content.

The use of diagnostic testing in the selection of program participants was reported by over 1/2 of the projects from which data were available (40). Achievement batteries were used for diagnosis and selection by four summer projects and one winter project. Six projects used intelligence tests as a diagnostic measure for selection. Several programs employed one or more types of reading tests: oral reading tests were used by five projects; reading readiness tests were used by three projects; five projects used diagnostic reading tests while one winter project used a test of reading capacity. Other tests used were in the areas of visual perception, dyslexia, speech, and vocabulary. There were also several locally made tests.

RECOMMENDATIONS

Our data indicate that, for the most part, projects are serving the appropriate population, but that resources could be even more efficiently utilized if greater care were taken to focus efforts to those needing it. This is a concern of the National Council on the Education of Disadvantaged Children and has been since the beginning of Title I.[1] Current Title I guidelines are clear but perhaps too general to be of assistance to project personnel in selecting students.[2] We recommend:

(9) THAT MORE SPECIFIC GUIDELINES AND ASSISTANCE BE PROVIDED BY THE STATE DEPARTMENT TITLE I OFFICE TO LOCAL SCHOOL DISTRICTS FOR DETERMINING ELIGIBILITY FOR PARTICIPATION IN PROGRAMS IN ACCORDANCE WITH THE INTENT

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[1] Report of the National Advisory Council on the Education of Disadvantaged Children, U. S. Office of Education (GPO 911-478), March, 1966, p. 17; and, Fourth Annual Report of the Council, 1969, p. 43.

[2] Guidelines Title I of E.S.E.A. of 1965, Department of Education, Bureau of Elementary and Secondary Education, Boston, Massachusetts, July, 1968, p. 2.

OF TITLE I LEGISLATION AND THAT THE TITLE I OFFICE CONSIDER REQUIRING MORE DETAILED INFORMATION ON CRITERIA FOR SELECTING STUDENTS.

In some of the summer programs, anyone was able to attend whether or not they met any special criteria. This appeared to be in violation of specific policies set by the U. S. Office of Education.[1] We therefore recommend:

(10) THAT SUMMER PROJECTS BE MORE CAREFULLY MONITORED TO INSURE THAT TITLE I FUNDS ARE NOT BEING USED TO FINANCE A REGULAR SUMMER SCHOOL WHICH CAN BE ATTENDED BY ANYONE AND WHICH SHOULD BE FINANCED BY LOCAL DISTRICTS.

D. PROJECT EVALUATION

13. WHAT KIND OF EVALUATION DESIGN WAS USED?

Where possible, observers used the "X and O" format of Campbell and Stanley as reported in Gage's Handbook of Research in Teaching[2] *for describing the*

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[1] See memorandum from the U. S. Office of Education dated June 14, 1968, on the subject of "Misuse of Title I Funds by Supplanting State and Local Funds." A copy of this memorandum may be found in the Title I Guidelines, p. 17. (See previous reference.)

[2] Campbell, Donald T., and Stanley, Julian C., "Experimental and Quasi-experimental Designs for Research on Teaching," in Gage, N.L. (Ed.) Handbook of Research on Teaching, Rand McNally & Co., Chicago, 1963. A modified form of the Campbell and Stanley code for describing

basic structure of evaluation designs used by the projects. We were interested to note the range of designs, if any, and their levels of sophistication, since the more sophisticated and appropriate the design, the better feedback for program improvement. Information was collected on whether or not the design included comparison as well as treatment groups and, if so, how the comparison group was selected; whether or not treatments or conditions were applied or held constant throughout the project; whether or not there had been a differential loss of respondents from the comparison groups; and, whether or not the comparison group was in a parallel program.

One aspect of some projects' organization made them more difficult to evaluate than others, namely, the involvement of a cooperative arrangement with several institutions, particularly those that were non-public. Inquiry was made to glean information on how the evaluation was carried out in these kinds of projects and who did it.

If the evaluation design adopted a specific measurement procedure utilizing pre- and post-tests, information was collected to determine whether or not project personnel considered the importance of making certain that nothing other than the experimental variables occurred between the first and second measurements unless accounted for in some way.

Inquiry was also made to ascertain whether or not project directors or evaluators made any systematic

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the evaluation designs was used, in which X = exposure of a group to an experimental variable or event (treatment) and O = process of observation or measurement. The graphic presentation of the design can be used to analyze experimental strengths and weaknesses of the evaluation in respect to project concerns.

> *attempt to describe and measure any of the characteristics of the physical and social environment which were thought to be relevant to the outcomes of the project.*
>
> *It frequently happens that a project evaluation focuses only on one or two aspects of the program. Thus, note was taken if there were any project activities which were thought to be meaningful that were not included in the evaluation.*
>
> *Since some program effects may not be felt for a year or more, note was made of all longitudinal investigations of Title I efforts and all programs which included efforts to follow each student over more than a period of a year.*
>
> *Finally, it was determined whether or not the project planners or evaluators had devised and were using a schedule, such as PERT charting, for the evaluation process itself.*

Out of 37 projects from which data were available, 16 projects reported no evaluation design. Out of our sample, only 8 winter projects and 13 summer projects had some kind of evaluation design. The most common was the simple pre-test, post-test design (0 X 0) used by 5 winter and 12 summer projects. In addition, this design was used for parts of one other winter and one other summer project. Three projects used a repeated observations format (0 X 0 X 0 X 0) during the program, while one project used the same format on a year-to-year basis. The pre-test only (0 X) and the post-test only (X 0) designs were each used once. A sophisticated pre-test, post-test control group design was used in one summer project, the control group having been selected from schools on the periphery of the target area. In this case, the evaluators agreed that pretest, post-test arrangements in a summer program cannot yield reliable gain scores. According to local officials, such testing was done only because it was required by the Community Action Agency and the State Department.

In the case mentioned above, the comparison groups were selected because they were considered to be comparable in basic demographic characteristics, while at the same time having no special Title I programs. Treatment conditions were applied and held constant throughout the program; there appeared to be no differential loss of respondents from the comparison groups.

Having evaluation designs which include no control group represents a major obstacle in discovering the value of Title I programs as compared to what is offered by the regular school program, not only for disadvantaged children, but for the total school population as well.

Out of 40 projects from which data were available, no project made any attempt to measure quantitatively any characteristics of the environment thought to be relevant to the concerns of project objectives.[1] Ten projects made some kind of an attempt to describe characteristics of the environment which were considered to be important in achieving project objectives.

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[1] See Wolf, Richard, "The Measurement of Environments," Proceedings of the 1964 Invitational Conference on Testing Problems (Princeton, N.J: Educational Testing Service, 1965) pp. 93-106.

Only one project out of 38 for which data were available gave consideration to the evaluation problem of making certain that events other than those which had been specifically designated as part of the Title I treatment were controlled in some way and did not affect results of pre- and post-tests.

Thirty-one projects out of those from whom data were available (37) reported no schedule set up for the evaluation process. Three projects had set test dates and evaluation form submittal deadlines while three others indicated they did have a kind of rough schedule to go by. In no case was PERT (Program Evaluation Review Technique) charting reported.

In our sample, only 2 projects out of the 40 from which data were available were listed as cooperative projects and only 13 involved non-public school participation.[1] Two of these projects had no evaluation to speak of. In the remaining projects, evaluation was done by the public school staff, with all students being included in one evaluation. There is thus no real evidence of cooperative evaluation and very little of the parochial school takes part or benefits from the process.

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[1] Our data are consistent with the finding of the National Advisory Council on the Education of Disadvantaged Children. They found that "non-public school officials are rarely included as active consultants in Title I planning and evaluation despite federal guidelines and despite the contribution they might make in strengthening their city's overall program." Fourth Annual Report on Title I, 1969, p. 41.

Out of 37 projects from which data were available, 15 indicated that provision was made for some kind of follow-through on Title I children from year-to-year. In 22 of the projects, no follow-through was evident.[1]

Observers noted a lack of communication from summer projects to the regular school year. In many cases, the communication was an informal conversation among interested teachers. Few regular school year teachers, except those hired for the summer have observed summer activities. In those summer projects where children were selected late in the year or came on a volunteer basis, there was nearly always a lack of basic information from the regular school files. Some projects made a point of having records available while others had not considered it or had decided against it. In general, follow-through from year-to-year or from summer to winter has not been very systematic or successful.

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[1] The 1968 Massachusetts Evaluation Report on E.S.E.A. Title I Activities (Bureau of Elementary and Secondary Education, State Department of Education, December, 1968) indicates that this has been a problem, but that "folders, test data, and progress reports developed on project pupils during the summer must be forwarded to their school-year teachers so that the teachers can be alert to the particular needs and individual progress of these children." (p. 12) Our data indicate that this is generally overlooked.

There seems to be a division of opinion and a complex philosophical question concerning the issue of follow-through with the Title I children. With funding remaining basically at the same level or declining each year, local education agencies must choose between serving the same age levels each year or following through on the children who are served by the project during the first year over a period of several years, thereby advancing the grade level of the program with them, or perhaps some combination. Some project directors purposely recruited the same children for consecutive summers while others set an opposite policy.

14. WHAT MEANS WERE USED TO MEASURE STUDENT PERFORMANCE?

All standardized tests used in measuring student performance were tabulated; locally made tests were collected or described; and, other sources and methods of collecting information such as questionnaires, logs, attendance records, anecdotal records, and unobtrusive measures were described and their source noted, i.e., staff members, community agencies, parents, or students. We also inquired as to whether or not tests were given regularly within the school or whether or not there was special testing in the Title I project itself. Of particular concern here was finding out whether or not there were any types of baseline data available that were different from pre-

> *tests and in what way these data were used. Information was also gathered on: the relationship of data collected to project objectives; whether or not consideration was given to the reliability and validity of the tests used; whether or not evaluators were sensitive to the fact that changes in observers, scorers, or calibration of measuring instruments can influence changes in the obtained measurements; and, grading policies.*

Thirty-two projects out of a sample of 43 (74%) used standardized tests for evaluation of student progress. These figures do not include testing done as a means of selecting project participants. The 74% figure given includes standardized tests which were given as part of the regular school testing program as well as any special testing which might have been given especially for Title I evaluation.

Achievement batteries were most popular in both winter and summer projects. They were administered in about 1/3 of the projects using standardized tests. Sixteen projects used some type of reading test, including achievement, diagnostic, and oral reading tests. Intelligence tests, individual and group, were administered in several projects. Less usual kinds of standardized tests used included: perception tests; motor-proficiency tests; personality, social and emotion behavior tests; and drop-out identification tests. It should be noted that when a project is reported as giving standardized tests, they were not necessarily used with all students in a given project.

Testing of teachers was almost entirely lacking.[1] One project did use a standardized attitude test for teachers and a classroom observation schedule for teachers. The use of instruments devised by the school system was not mentioned at all by the winter projects and by only 4 summer projects. Questionnaires, uniform subject matter tests, progress reports and anecdotal forms were noted. It is quite likely that there is a greater use of such instruments than our data indicate, because school personnel often did not think to mention such types of measurements in response to questions concerning evaluation.

Lack of testing in the areas of self-concept and attitude was clearly evident, particularly in light of the frequency with which the stated objectives of the projects included some kind of improvement of self-concept and attitudes. There is no doubt that it is more difficult to measure changes in self-concept and attitude than practically any other form of academic achievement, but there has been progress made in this area which should be disseminated to project planners and evaluators.[2]

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[1] Project planners and directors rarely think of teacher evaluation, yet teachers are recognized as the chief determinant of successful programs. Obviously, some attention needs to be given to this oversight, delicate though it is.

[2] The Massachusetts Title I Evaluation Report for 1968 makes reference to evaluation problems in this area. Considerable work remains to be done. Much of this will be dependent upon research efforts on the part of institutions of higher learning. (See page 15 of the Report.)

It is not our purpose to comment on the quality of standardized tests being used. Most of them have received objective reviews in journals, The Mental Measurements Yearbook,[1] and similar other sources. It is, however, our obligation to raise the question of applicability of the testing being carried out to the actual objectives of projects. Observers frequently noted that, in general, most project staff members did not consider testing done in the name of project evaluation directly pertinent to their use, but more as a necessary exercise for State Department and federal uses. Considerable time, money, and effort is going into testing. The meaningfulness and usefulness of this effort in relationship to the individual Title I project is questionable and needs a good deal of further study. A better understanding of the total measurement problem in relationship to project objectives and program evaluation is required before more effective measurements can take place. (Please see Appendix VI, page 317, for further details on standardized tests used.)

Data on the performance of children from previous years was recorded as available in 31 out of 38 projects from which data were available. This, however, is in no way an indication that it was being used. This question was intended to find out if such information were on hand, since it is generally one of the best sources of comparative data which might be used in evaluation. In many projects awareness of how data already being collected could be used to strengthen the Title I evaluation design was lacking.

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[1] Buros, O. K. (Ed.) The Sixth Mental Measurements Yearbook, Highland Park, N. J: The Gryphon Press, 1965.

Since project objectives were not stated in behavioral terms and were in some cases vague and misleading, and written and spoken objectives differed, questions concerning the relevance of measurement to objectives did not always produce clear-cut responses. Sixteen out of 39 projects from which data were available felt that the data they collected were relevant to project objectives. It was evident that in 23 of the projects, data could not be regarded as specifically relevant to project objectives.

Most projects were using standardized tests and were unconcerned as to the reliability and validity with regard to the Title I population. For those few tests which were locally made, no effort was made to establish validity or reliability. Since comparison groups were not evident and assuming this indicates that the testing purpose is to check progress of the Title I population only, then more attention needs to be given to these considerations.

Only two out of 38 projects from which data were available gave consideration to the fact that changes in observers, scorers, or calibration of measuring instruments may introduce biases into measurement results. Considerable use of checklists, multiple observations, etc., makes this question all the more pertinent, but at the same time it was generally unnoted. For example, one summer project used a rating list three times in the summer for each child. Each time the checklist was marked, it was done so by a different teacher. This, of course, illustrates the problem of rater consistency and is one example out of many of how lack of sophistication in evaluation may permit procedures which introduce so many biases that evaluation results cannot be considered acceptable.

Twenty-two out of 35 projects from which data were available did not make any use of unobtrusive measures.[1] In one project the principal noted a decline in office visits among project students. Comparative attendance records were also used as a means of determining project success. Use of more unobtrusive measures should probably be encouraged. They can probably be relatively unsophisticated and yet very meaningful when used particularly in combination with more traditional kinds of measures.[1]

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[1] For a full exposition on this subject, see Unobtrusive Measure: Nonreactive Research on the Social Sciences, by Webb, Campbell, Schwartz, and Seckrest, Rand McNally & Company, Chicago, 1966.

In 14 out of 40 projects from which data were available, no attempt was made to solicit suggestions for the improvement of the project. Of the 26 projects which did ask for suggestions, most asked members of their own staffs, six asked parents, and five consulted with students. Only one project reported soliciting any suggestions from a community organization. In most cases, the solicitation was extremely informal and therefore not too likely to be taken seriously by the one from whom information was solicited.

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[1] "Whatever the level of training, we need evaluators who are facile in using unobtrusive measures for data collection as well as in indexing programs through more traditional measures. Educational evaluators must understand the fallibility of tests and of less traditional avenues of assessment and be able to conceptualize assessment problems related to process and outcome in a variety of ways. The argument for the use of unobtrusive measurements in educational evaluation rests on the presumption that it is possible to select a group of measures which have compensatory strengths and unshared weaknesses. Traditional educational research measures and unobtrusive measures are complementary to one another and not intersubstitutable in the training of educational researchers."

See Robert E. Stake and Terry Denny, "Needed Concepts and Techniques for Utilizing More Fully the Potential of Evaluation," in National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 373.

Increased effort in this area is needed, including the formalization of procedures for making suggestions and their subsequent consideration by project officials. This would broaden the base from which suggestions are solicited and bring several perspectives to bear upon the evaluation process.

In regard to the question of grading, only one summer project out of 18 used grades as a means of evaluating individual student performance. From informal conversations, observers noted that teachers were generally pleased with a no-grading philosophy for Title I children.[1] Generally speaking, instructional staff felt concerned that disadvantaged students meet with success and that they feel positively about their ability to achieve. Instead of grades, there was usually some kind of informal, ongoing feedback to the individual student on his performance. Data from the winter projects indicate indecision on grading policies on Title I children during the school year. More winter projects graded than did not. Of those who graded, the majority used the same grading philosophy as the school system of which they were a part. Some mentioned using grading philosophies that were different than that used by the regular school system, one specifically indicating that grading in Title I was "easier."

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[1] Although a no-grading philosophy may have special applications for teaching the disadvantaged, some kind of continual feedback is important for the child. See the section on "Appraisal" in The Conditions of Learning, by Robert M. Gagne, published by Holt, Rinehart & Winston, 1964, p. 227.

15. *HOW WERE DATA ANALYZED?*

> *Information was obtained on how the data were analyzed and by whom; what statistical procedures were used in the treatment of the data; whether or not evaluators took into consideration that measurements of groups selected on the basis of their extreme scores may reflect in their post-tests a statistical regression toward the mean; whether or not evaluators took into consideration the fact that normal maturation will produce within each student a degree of progress related to nothing else other than the function of the passage of time.*

Although great quantities of data were collected by many projects, these data were often not analyzed or utilized. Out of 36 projects from which data were available, 22 made little or no effort to analyze data. This figure includes those who collected no data in the first place. Ten out of the 36 computed gains scores in terms of grade equivalencies; one plotted simple graphs on some kinds of performance measures, but with no sophistication in analysis of data techniques. One project used a co-variate analysis for comparison with a control group as a part of their own evaluation. Only two projects out of 40 from whom data were available took into account regession effect when analyzing data.[1] An example of a project which did not take it into account was one which used Spring test scores as a major selection criterion, but also as a pretest. Title I students therefore represented test scores which deviated significantly from the mean. Program treatment effects notwithstanding, one can expect a regression toward the mean.

Most evaluators also did not take into account a general maturation effect when analyzing data. Five projects indicated that they had been aware of the effects of general maturation and fewer than that took any concrete steps to allow for it when analyzing and interpreting data on gains scores.

16. WAS THERE ANY ATTEMPT TO RELATE THE PROJECT RESULTS WITH THE NEEDS ASSESSED?

If project results are not filling assessed needs, then it is clear that modification must be introduced into the program.

Out of 36 projects from which data were available, only 10 made systematic attempts to relate project results with the needs assessed and in many of these this was not a part of any official procedure set up as a part of a given project's formal evaluation component. Generally speaking, this represents one of the missing links in the continuous process of program evaluation leading into program modification.[1]

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[1] A good article on the importance of taking regression effects into account is "The Measurement of Change," by Frederick M. Lord, in On Evaluating Title I Programs, p. 85, published by Educational Testing Service, 1966.

RECOMMENDATIONS

It is clear that good evaluation is the sine qua non of program improvement. There is little hope of insuring good evaluation unless adequate time and resources are allocated for this purpose. Above all, qualified personnel are required. Given the scarcity of trained evaluators, it is all the more important for this kind of expertise to be present in the Title I Office.[2] Although the State report for 1968[1] indicates a growing sophistication in evaluation (and we have seen some evidence for this), our data nonetheless clearly indicate a great need for a general upgrading of the evaluation process employed by project directors. We therefore recommend:

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[1] The National Advisory Council on the Education of Disadvantaged Children reports that the most frequent reason for program failure is "instruction irrelevant to the stated objectives of the programs." Fourth Annual Report on Title I, 1969, p. 23.

[2] It is a natural sentiment to have reservations about really sound evaluation because it will reveal shortcomings and take away excuses for continuing in the same old way. Donald Campbell expresses the situation clearly: "It is one of the most characteristic aspects of the present situation that specific reforms are advocated as though they were certain to be successful. For this reason, knowing outcomes has immediate political implication. Given the inherent difficulty of making significant improvements by the means usually provided and given the discrepancy between promise and possibility, most administrators wisely prefer to limit the evalua-

(11) THAT THE TITLE I STATE DEPARTMENT OFFICE RETAIN TWO OR MORE FULL-TIME PROFESSIONALLY QUALIFIED PROGRAM EVALUATORS WHO CAN BE ASSIGNED THE RESPONSIBILITY FOR REVIEWING THIS ASPECT OF ALL PROPOSALS, MONITORING THE EVALUATION PROCESS OF THE PROGRAMS, AND FOR HELPING TO MOBILIZE EVALUATION RESOURCES TO ASSIST LOCAL DISTRICTS AS NEEDED.[2]

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tions to those the outcomes of which they can control, particularly insofar as published outcomes or press releases are concerned. Ambiguity, lack of truly comparable comparison bases, and lack of concrete evidence all work to increase the administrator's control over what gets said, or at least to reduce the bits of criticism in the case of actual failure. There is safety under the cloak of ignorance." No doubt this statement speaks to administrators of local projects and the Title I Office in the State Department, but it is particularly true in our case, since what we advocate (especially in the section on training programs), though based on research, nonetheless has never been tried out systematically on any significant scale. Yet, it will be critically important for any such efforts to be rigorously evaluated, political vulnerability notwithstanding. See D. T. Campbell, "Reforms as Experiments," American Psychologist, vol. 24, no. 4, April, 1969, p. 409.

[1] Massachusetts Evaluation Report on E.S.E.A. Title I Activities, 1968, p. 33.

[2] One percent of the State allocation for Title I can be used by

Since State agencies are frequently not able to compete for adequately trained staff,[1] particularly in the area of evaluation, we suggest:

(12) THAT THE TITLE I STATE DEPARTMENT OFFICE ESTABLISH CONTRACTUAL AGREEMENTS WITH BUSINESS OR INSTITUTIONS OF HIGHER LEARNING TO PROVIDE TRAINING AND/OR CONSULTANT SERVICES TO EVALUATION STAFF MEMBERS ON THE LOCAL LEVEL OR ENCOURAGE LOCAL DISTRICTS TO DO SO.[2]

(13) THAT SPECIFIC ENCOURAGEMENT BE GIVEN TO LOCAL EDUCATIONAL AGENCIES TO APPOINT PAID EVALUATORS TO TITLE I PROGRAM STAFFS AND THAT IT BE MANDATORY THAT THESE EVALUATORS BE INCLUDED ON THE PLANNING STAFF.

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the State for administration of programs. In Massachusetts this amounted to $167,965 in fiscal year 1968-69. During last year, only $77,663 was used, the rest being returned to the federal government. Thus, this recommendation is not unrealistic from a financial point of view.

[1] Since many of our recommendations involve the State Department Title I Office, it may be useful for those unfamiliar with the operation of that Office to have a brief description of it. Please see Appendix VIII, page 343.

[2] In the section on Compensatory Education, the Willis-Harrington Report recommends that "consultant staff should be provided through the Division of Curriculum and Instruction essential to unifying, coordinating, and strengthening compensatory education programs and services." See page 44.

(14) THAT THE STATE DEPARTMENT OF EDUCATION ORGANIZE A POOL OF UNIVERSITY CONSULTANTS WHO CAN BE DRAWN UPON BY LOCAL DISTRICTS FOR ASSISTANCE IN PLANNING, IMPLEMENTING, AND EVALUATING THEIR PROJECTS.[1]

(15) THAT PART OF THE FUNDS FOR TITLE I PROGRAMS SHOULD BE MADE AVAILABLE TO PROVIDE RELEASE TIME FOR POTENTIAL TITLE I STAFF MEMBERS FOR PLANNING, EVALUATION, PRE-SERVICE, AND IN-SERVICE TRAINING. GUIDELINES SHOULD SPECIFY THIS AND SUGGEST VARIOUS KINDS OF ARRANGEMENTS FOR DOING IT.

With the possibility of adequate assistance being offered, it becomes reasonable to establish the requirement embodied in the recommendation:

(16) THAT SOUND EVALUATION DESIGNS BE CONSIDERED A REQUIRED PART OF THE PROPOSAL FOR FUNDS AND THAT NO PROJECT BE FUNDED IF IT DOES NOT HAVE AN ACCEPTABLE EVALUATION DESIGN.

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[1] The Massachusetts Advisory Council on Education and the Title I Office in the State Department have already acted on this recommendation. Consultants from various institutions of higher learning have been identified and already brought together for a discussion of their responsibilities. Lists of these consultants and their addresses have been made available to all Title I programs.

Evaluation has always been required for Title I,[1] but too loose a definition of evaluation has been applied in approving and monitoring projects. Good evaluation requires financial support. In many cases more resources than are currently permissible may be needed. We recommend:

(17) THAT THE STATE DEPARTMENT SEEK, THROUGH WHATEVER APPROPRIATE MEANS, TO HAVE FISCAL POLICIES RELATED TO ALLOCATIONS FOR EVALUATION CHANGED TO ENCOURAGE MORE SUBSTANTIAL SUPPORT FOR EVALUATION.[2]

To upgrade further the quality of evaluation, we recommend:

(18) THAT SPECIFIC GUIDANCE THROUGH THE TITLE I STATE DEPARTMENT OFFICE (WHICH MAY FIND IT HELPFUL TO DRAW UPON CONSULTANTS FROM APPROPRIATE UNIVERSITY DEPARTMENTS) BE GIVEN TO LOCAL DISTRICTS WHO ARE PLANNING A TITLE I PROGRAM ON:

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[1] See Title I Guidelines, Section J on Evaluation, p. 22.

[2] It should be noted that E.S.E.A. Title III (PACE) brings about $5 million into Massachusetts annually as opposed to the $16 million provided by Title I. Title III permits the State agency a much larger administrative budget (up to 5% as opposed to 1%). If Title I projects are to have well-designed evaluation programs, more staff support in this area will be needed.

(a) MODELS OF ACCEPTABLE EVALUATION DESIGNS AND PROCEDURES;[1]

(b) WHAT KINDS OF TESTS AND MEASUREMENTS ARE VALIDATED AND APPROPRIATE (PARTICULARLY IN THE AREAS OF SELF-IMAGE AND ATTITUDE CHANGE) TO USE IN CONJUNCTION WITH GIVEN PROGRAM OBJECTIVES;[2]

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[1] For example, many new designs, such as the regression discontinuity design, have begun to appear, several of which should be made known and used, particularly in the case of the evaluation of model programs. See the section on Regression Discontinuity Design in the article "Reforms as Experiments," by Donald T. Campbell, published in the American Psychologist, vol. 24, no. 4, April, 1969, p. 419. This design has direct relevance to the evaluation of programs for the disadvantaged.

[2] The Society for the Psychological Study of Social Issues (SPSSI) has published a special supplement, Guidelines for Testing Minority Group Children, which appears in the Journal of Social Issues, vol. XX, no. 2, 1964. It is available from SPSSI, P.O. Box 1248, Ann Arbor, Michigan. Collection and dissemination of these kinds of publications would make a good beginning. This recommendation parallels the recommendation of the National Advisory Council on the Education of Disadvantaged Children that:

"Professional educators and social scientists should intensify a review of current achievement tests to further reduce 'culture bound' components that are biased against the disadvantaged child and conceal indications of his true, latent ability; and, that these professionals should also move beyond purely cognitive achievement tests and into other realms--self-concept, creativity, motivation, behavior--where compensatory education may have equally important long-range results." Fourth Annual Report of the National Advisory Council on the Education of Disadvantaged Children, Title I - E.S.E.A: A Review and a Forward Look - 1969 (GPO 0-331-373), p. 5.

(c) TYPES AND METHODS OF USING UNOBTRUSIVE MEASURES;[1]

(d) HOW TO ANALYZE, USE, AND STORE DATA SO THAT THE INFORMATION IS HELPFUL IN INTRODUCING MODIFICATIONS TO IMPROVE THE PROGRAM;

(e) WAYS OF HANDLING EVALUATION IN THE CASE OF JOINT OR COOPERATIVE PROJECTS, PARTICULARLY THOSE INVOLVING NON-PUBLIC SCHOOLS;[2] AND,

(f) PERT CHARTING OR SOME OTHER SIMILAR DEVICE FOR SETTING UP AND MONITORING THE EVALUATION PROCESS.[3]

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[1] Webb, Eugene T., et.al., Unobtrusive Measure: Nonreactive Research in the Social Sciences, Rand McNally & Company, Chicago, 1966.

[2] The National Advisory Council on the Education of Disadvantaged Children has expressed concern for non-public school participation. They recommend that "the U. S. Office of Education should continue to urge the involvement of non-public school officials in the planning and evaluation of Title I programs." See whole section on "Participation of Non-public School Children," pages 5-6 of Fourth Annual Report, Title I, 1969.

[3] Cook, Desmond, Program Evaluation and Review Technique: Applications in Education, U. S. Office of Education, 1966.

Putting theory into practice and ascertaining its efficacy over a long period of time is of primary importance. Our data indicate that such demonstrations are needed and would be extremely useful for ongoing projects. They would undoubtedly serve as a powerful stimulus for modifying and improving many of the projects which are repeated annually. We therefore recommend:

(19) THAT THE TITLE I STATE DEPARTMENT OFFICE CONSIDER SETTING UP A SAMPLE OF PROJECTS FOR LONGITUDINAL EVALUATION OF THE EFFECTIVENESS OF TITLE I PROGRAMS. THIS WOULD NECESSITATE DETERMINING THE KINDS OF DATA TO BE COLLECTED AND ASSISTING LOCAL DISTRICTS IN SETTING UP AN APPROPRIATE SYSTEM FOR COLLECTING AND STORING THE DATA. OF PARTICULAR CONCERN HERE ARE: THE COMPARATIVE EVALUATION OF PAIRED MODELS OF TITLE I PROGRAMS WHICH VARY ON ONE DIMENSION, SUCH AS THOSE PROGRAMS SERVING THE SAME AGE GROUP EACH YEAR COMPARED TO THOSE FOLLOWING-THROUGH ON THE SAME STUDENTS FOR SEVERAL CONSECUTIVE YEARS AS STUDENTS CHANGE FROM ONE GRADE TO ANOTHER; THE COMPARATIVE MERITS OF SUMMER VS. WINTER PROJECTS; THE COMPARATIVE MERITS OF HIGHLY STRUCTURED VS. A GENERAL ENRICHMENT, RELATIVELY UNSTRUCTURED APPROACH; AND, WAYS OF DETERMINING HOW VERY SMALL ALLOCATIONS OF FUNDS CAN BE MOST EFFECTIVELY USED.

E. PROGRAM MODIFICATION

17. WHAT IS THE FORM OF THE EVALUATION REPORT AND DOES IT DISCUSS IMPLICATIONS FOR MODIFICATION?

The form of the report is often a powerful determinant as to how it will be used. We were interested to note: whether or not evaluation reports were turned in merely as a fulfillment of a requirement of the State Department or whether or not the report took on different forms which might make it maximally useful to project staff members in modifying certain aspects of the program; and, whether or not it contained a discussion of implications or recommendations for modification.

Approximately 1/5 of the projects responding to questions on their evaluation reports indicated that they had none. Since the State Department is required by law to receive such a report, it is likely that someone other than those directly related to the project writes the report or that the staff of a current project did not have this assignment.

Data on whether or not reports discussed implications or made recommendations for modifications were scant. Out of 15 projects from which data were available, all indicated that the report did not go into a discussion of implications for modification.

Generally speaking, these results point to the fact that the evaluation report itself is not set up to be used as a vehicle through which modification might be implemented.

18. WHAT WERE THE CHARACTERISTICS OF THE DISSEMINATION OF EVALUATION RESULTS?

> *Since the decision to modify a program ought to be based on evaluation, we were interested to find out how evaluation results were disseminated: who got the report; when the results were communicated; whether or not there was a formal mechanism in operation so that upon the analysis of feedback, the project could be quickly modified (i.e., through weekly meetings to discuss project progress); whether or not the evaluation was used in replanning a project; whether or not information on the progress of individual children who were removed from the regular classroom was reported to their regular classroom teacher in any systematic way; and, whether or not techniques, materials, and teaching approaches used in Title I projects had been communicated to the regular school program and whether or not they had been incorporated into the regular school program.*

The timing of dissemination of the evaluation report varied widely from project to project. In most cases there was no set time which occurred year after year in a given project. Many received it shortly after the end of the project, several six months after the conclusion, and some were able to have it only upon request at any given time. Only one out of 37 projects for which data were available indicated that the teaching staff received the evaluation report itself. The most frequent recipient was the State Department, followed by the school board and/or the superintendent.

About half of the projects in the sample had a feedback mechanism in operation for rapid modification of the program. Generally, these were of a staff meeting nature. Only two winter projects gave a positive response to this question, leaving one to suspect that in a short program and one not competing with regular school programs, more direct attention is paid to facilitating feedback. Whether such mechanisms are utilized is not covered here, but rather that the opportunity is present. Most of the observers agreed that project staff tended not to think of evaluation as a continuous process but rather as something that occurs as an end-of-the-year activity.

Our data are scant on the question of communication between Title I teachers and regular classroom teachers in regard to individual Title I children. Generally speaking, when a child is removed from a classroom for Title I services, the general consensus seems to be that most Title I teachers do communicate with the regular classroom teachers but this is often informal and unsystematic. On occasion this did provide the means by which some modification could be produced, but again this depended upon individual initiative and was something not built specifically into the program with administrative support and supervision. As to whether or not Title I activities were adopted into the regular school program, 21 projects out of 37 reported that innovations, ideas, or materials first used in Title I were later picked up by the regular program. Sixteen out of the 37 projects indicated that there had been no adoption of Title I activities into the regular program. Thus, there is evidence for the positive effects of dissemination, even though they are taking place slowly. This is an intended by-product of Title I, since good compensatory education is in many ways a good model for high quality education in general. Our data indicate that it has been easier for materials and equipment to be utilized by the regular program rather than teaching approaches and personnel, but there is some evidence of this as well. Some of the activities first adopted by Title I programs and now evident in the regular school program include new materials and techniques, specialists and special programs, second language programs, summer school in general, and the adoption of less rigidly structured regular school programs during the winter due to the experience with the summer, and use of teacher aides. (See Appendix VI, page 323, for tabulation.)

19. WHAT WERE THE OPINIONS OF PROJECT DIRECTORS AND STAFF MEMBERS CONCERNING THE SUCCESS AND/OR VALUE OF THE PROJECT?

We were interested to find out the opinions of project directors and staff members on the

> *effectiveness of the projects and to determine the extent to which there was inter-staff agreement. Staff members were asked what changes they would make if they were to start the program from the beginning again and whether or not any of the changes they would like to make had been incorporated or were going to be incorporated when the program is replanned. They were asked to indicate some of the chief negative outcomes of the project which were not anticipated, whether or not these were reported in the evaluation report and what were some of the unanticipated positive outcomes of the project and whether or not these were incorporated into the report.*

There was such a diversity of replies to the question, "What changes would you make if you were starting from the beginning?" that no specific pattern emerged. The following selected responses are reflective of that diversity:

Strengthening of self-concept should be more emphasized
Addition of pre-service training
Should use homogeneous groupings to facilitate learning
Have students for the first two periods in the day rather than in the afternoon
Start with younger children
Hire more experienced teachers
Utilize more teacher aides
Have a better test selection
Cut connections with 50% of the outside agencies
Have more diagnosis of specific problems
Add a director of evaluation

Have better classroom monitoring
Have more planning time
Remove restrictions from E.S.E.A. monies
Have more guidance from the director
Have more money
Have more field trips
Have more time

Out of the 24 projects from which data were available, one indicated that the changes that had been desired were made. Eight projects indicated that the changes were not made, while five were fairly certain that the changes would be made next year on replanning. Three projects felt that the changes were not possible and therefore there was no hope that there would be a change.

It is reasonably clear from our data that staff members in general were aware of the need to make modifications and although there were many suggestions made, few of them had been implemented. Since many of the changes would entail having more financial support, many project personnel felt that the changes would not be forthcoming.

Data were gathered from 31 projects in the sample relative to unanticipated negative outcomes. Again, responses were highly diversified. Sixteen of the projects felt that there were no unanticipated negative results. Others listed were as follows:

Emotionally disturbed children caused too much trouble
Children were forced by parents to attend

- Too few children could be accepted
- Money spent for the counselor was unnecessary
- Summer Title I students were "picked on" by the Fall teachers ("Well, maybe they let you do that last summer, but in my class...")
- Negative attitude on the part of the school committee
- Parents withdrawing their children from the project
- Spontaneous enrollment of students into a class with no notice to teachers so that plans could be made
- Students became attached to the Title I class and did not want to leave
- Children were defensive about being in Title I classes

As for unanticipated positive outcomes, 11 out of 27 projects for which data were available recorded no unexpected outcomes. Other mentioned were as follows:

- Change of attitude for the better
- General success of the pupil (not just reading)
- Full acceptance of teachers and administrators of the program
- Significant change in the child's attitude toward the school
- Overwhelming positive response of parents
- High morale of Title I staff
- Improvement of community attitude towards the program
- Positive responses of children
- Teachers realizing for the first time new aspects of the needs of children
- The contribution of having breakfast to the success of the program

Fewer pupils actually failing a grade

Although our data are meagre as to whether or not the unanticipated positive and negative outcomes were included in the evaluation report, we would judge that in general they were not, particularly in the case of the negative outcomes.

20. WAS THE EVALUATION PROCESS ITSELF EVALUATED?

> *Obviously a poor evaluation procedure or design will not yield the kinds of results which will enable a project director to modify his program with the aim of improving it in any sensible and systematic way. It is therefore necessary to evaluate the evaluation procedures in a given project so that evaluation itself might be improved. Inquiry was made as to whether or not project directors considered the evaluation procedures to have been successful or unsuccessful based on their experience.*

In 6 out of 28 projects for which data were available, the director indicated that he had not evaluated the evaluation, six felt that there were no successful procedures adopted, and the rest simply expressed preference for some basic approach to evaluation. Generally speaking, our responses indicate a lack of expertise in evaluation and therefore a limited capacity to make judgments about evaluation procedures.

21. WAS ANY ATTEMPT MADE TO CARRY OUT A COST ACCOUNTING ANALYSIS OF THE PROJECT?

> *An evaluation is not complete if it does not include information that will enable a judgment to be made as to whether or not the cost of the project is reasonable in light of what it accomplished.*

Responses were obtained from 25 projects out of the 43. In most of the projects, budgets were primarily allocated for salaries. In the smaller projects money tended to go mostly for materials and for the support of one or two teachers or aides. Three projects were reported to have budgets which were not in keeping with their priorities, although it was not clear what the priorities were.

While it was usually the case that the project director could give a very accurate accounting of how the money was spent, in no case did we find evidence of a sophisticated cost accounting system, where cost was related to priorities assigned to various project activities.

RECOMMENDATIONS

It is a common experience for administrators to require reports of various kinds which are never read or used. Evaluation reports are no exception and our data show that for the most part the basic purposes of evaluation reports (mofidication towards improvement[1]) are frustrated by:

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[1] "Evaluation studies are made to provide a basis for making

(a) The design of the report forms;
(b) The medium of the report;
(c) The pattern of dissemination; and,
(d) The timing and frequency of dissemination.

Rather than being a vehicle for change, evaluation reports are also frequently viewed as an official opportunity to justify what has been done by presenting the program in the most positive light possible. This attitude always has an effect on dissemination patterns and reduces its utility considerably. We believe the following recommendations are essential to the realization of the purposes of evaluation:

(20) THAT THE STATE DEPARTMENT TITLE I OFFICE CREATE AND ADOPT A NEW EVALUATION REPORTING SYSTEM, GIVING ATTENTION TO THE USE OF NEW REPORT FORMS, DIFFERENT MEDIA FOR DIFFERENT AUDIENCES,[1] PATTERNS OF DISSEMINATION,[2]

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decisions about alternatives and, therefore, in undertaking an evaluation study, one at once addresses himself to the question of utility." For a useful discussion on the purposes of evaluation as compared to research, see John Hemphill's chapter on "The Relationship Between Research and Evaluation Studies" in the Yearbook of the National Society for the Study of Education, LXVIII, Part II, 1969, p. 189.

[1] Written reports are often ineffective communicators. Translation of reports into audio-visual presentations for groups followed by discussion will usually be more effective.

[2] Students are rarely recipients of evaluation feedback, yet this can produce greater involvement and commitment to program modification, particularly if they can be included in planning the changes in the program.

AND FREQUENCY AND TIMING OF DISSEMINATION,[1] ALL GEARED TO FACILITATE PROGRAM MODIFICATION FOR IMPROVEMENT. SPECIFICALLY, EVALUATION REPORTS COMING AT THE END OF A PROJECT SHOULD BE REQUIRED TO INCLUDE CONCRETE RECOMMENDATIONS FOR PROGRAM MODIFICATION, OR PRESENT EVIDENCE AS TO WHY THE PROGRAM SHOULD NOT BE MODIFIED WHEN REPEATED.

(21) THAT EVALUATION RESULTS OF A PREVIOUS YEAR'S PROGRAM BE MADE A MANDATORY SOURCE OF INPUT FOR THE CURRENT YEAR'S PLANNING. PROPOSALS SHOULD THEREFORE REQUIRE SOME KIND OF EVIDENCE CONFIRMING COMPLIANCE.

(22) THAT THE STATE DEPARTMENT TITLE I OFFICE PROVIDE TITLE I PROJECT PLANNERS WITH GUIDELINES FOR SETTING UP MODIFICATION PROCEDURES IN RESPONSE TO AN ONGOING FEEDBACK PROCESS MAINTAINED AS A TEACHING STAFF AND ADMINISTRATIVE RESPONSIBILITY.[2]

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[1] Most project personnel regarded evaluation as a year-end or end-of-program activity rather than as a process of analyzing continual feedback and then making decisions about alternative ways to improve the program while the program is still going on. Both kinds are needed. The latter has many implications for the timing and frequency of reporting.

[2] Some writers make a useful distinction between feedback

(23) THAT PROJECTS BE ENCOURAGED TO INCREASE COMMUNICATION BETWEEN TITLE I AND NON-TITLE I PERSONNEL IN REGARD TO SPECIFIC TITLE I CHILDREN SO THAT BETTER CONTINUITY OF PROGRAMMING CAN BE MAINTAINED.

A substantial portion of educational programming in the public school system goes unevaluated. Yet there is no good reason why it, too, should not be evaluated. If it were, it could help to provide useful perspectives on Title I programs, while at the same time supplying the means for its change and improvement. For this reason we recommend:

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and appraisal. "The purpose of the feedback is to enable the teacher to make wise judgments about what to do next in the classroom; the purpose of the appraisal is to describe some state of need, readiness, or ability on the part of the child. These purposes are entirely different and therefore the fact that they are achieved through different procedures seems reasonable. These differences may be noted: (a) In feedback, the decision about what data to collect can be finally made only at the moment of collection, whereas, in appraisal, the decision can be made independently of the situation. (b) In feedback, the object under scrutiny is the activity of a complex system, whereas, in appraisal, it is an aspect of the personality structure of an individual. (c) In feedback, the categories must be useful to the teacher and usually will be expressed in her vocabulary, whereas, in appraisal, the categories should fit coherent theory and are often intelligible only to the researcher or some other non-participant." See Herbert A. Thelen, "The Evaluation of Group Instruction," in Educational Evaluation: New Roles, New Means, National Society for the Study of Education Yearbook, LXVIII, Part II, 1969, p. 119.

(24) THAT EVALUATION REPORTS BE DISSEMINATED TO THE REGULAR SCHOOL SYSTEM'S PERSONNEL AS WELL AS TO ALL MEMBERS OF THE PROJECT STAFF SO THAT ADOPTION OF EFFECTIVE TITLE I METHODS AND MATERIALS MAY BE ENCOURAGED IN THE REGULAR SYSTEM;[1] and,

(25) THAT THE STATE DEPARTMENT OF EDUCATION BEGIN TO ENCOURAGE SCHOOL DISTRICTS TO EVALUATE THEIR REGULAR PROGRAMS, DRAWING ON THE EXPERIENCE OF TITLE I PERSONNEL.

In the 1968 report on Title 1 compiled by the Title I Office of the State Department, a note was made that there was no way to "draw conclusions about the relationships between project cost and project effectiveness."[2] Yet this is an important part of evaluation and cannot be ignored. We therefore recommend:

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[1] "Title I is designed to benefit poor children. Somewhat paradoxically, however, the programs made possible by Title I are seriously challenging traditional educational practices and introducing new techniques that promise to benefit fortunate children as well. In time, the major reforms now underway in low-income schools may become accepted priorities for all schools." Title I/Year II, The Second Annual Report of Title I of the E.S.E.A. 1965, U. S. Office of Education, 1968, p. 3. For more specific details, see whole section on "Catalyst for Change" from which above quote is taken.

[2] Massachusetts Evaluation Report on E.S.E.A. Title I Activities, Bureau of Elementary and Secondary Education, State Department of Education, December, 1968, p. 29.

(26) THAT THE STATE DEPARTMENT GIVE SOME CONSIDERATION TO COST-EFFECTIVENESS[1] AND TO LONG-RANGE PLANNING INVOLVING THE DEVELOPMENT OF ACCOUNTING SYSTEMS FOR TITLE I PROJECTS IN ACCORDANCE WITH NEW METHODS OF PROGRAM BUDGETING.[2,3]

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[1] "Cost effective analyses...are designed to measure the extent to which resources allocated to a specific objective under each of several alternatives actually contribute to accomplishing that objective, so that different ways of gaining the objective may be compared." See pp. 37-38, Budgeting for National Objectives, a Statement on National Policy by the Research and Policy Committee for Economic Development, January, 1966.

[2] For a good exposition on the application of program budgeting to the field of education planning, see Hartley, Harry J., Educational Planning, Programming, Budgeting, Englewood Cliffs: Prentice Hall, 1968.

[3] In listing four imperatives for schools today, the Committee for Economic Development included one on cost-effectiveness: "School systems must employ continuously the results of cost-benefit and cost-effectiveness analyses in order to allocate effectively the resources available to education and to distinguish among programs of high and low priority." (page 13) In line with this imperative, they urged "immediate exploration by school administrators of the application of program accounting techniques in order to identify costs in school systems and to take advantage of cost comparisons. The adoption of such techniques by school districts will be advanced greatly if assistance and leadership in this area are provided by state departments of education and by university schools of business, economics, and education."

Innovation in Education: New Directions for the American School, Committee for Economic Development, New York, July, 1968, p. 19.

PART II

QUESTIONS AND OBSERVATIONS ON VARIABLES IMPORTANT TO COMPENSATORY EDUCATION

Since evaluation refers to the process of determining how well project objectives are being achieved, it is possible for a project to appear highly successful, even though the objectives being achieved are inappropriate or irrelevant to the main purpose of compensatory education. It is therefore essential to consider the appropriateness of objectives and the degree to which these objectives reflect an awareness of research findings relevant to compensatory education. Thus, the observations and questions of this part were designed to glean information from projects pertinent to variables which research has demonstrated to be critical to the success of compensatory education programs.

F. STAFF CHARACTERISTICS, SELECTION, RECRUITMENT

1. *CHARACTERISTICS OF PROJECT TEACHERS AND ADMINISTRATORS.*

Information was collected on amount and kind of prior experience of staff members, particularly in relationship to the present assignment of the Title I staff, length of time with the system, whether or not

> *staff members volunteered or were assigned to their positions, and the amount of time that was allocated for assignments. Of particular concern here was whether or not the responsibility of the direction of the project was an added duty to an already full load or a partial or new full-time position.*

A large majority of the Title I teachers had previous teaching experience. Only 10% of the projects out of the sample from which data were available (3 out of 29) had teachers with no teaching experience prior to their Title I assignment. There were no reliable data from which to compute the average number of years of teaching experience of Title I teachers. (Our impression is that it is somewhere between 9 and 15 years.)

With regard to significant background in relationship to assignment, staff from 26% of the projects for which data were available (39) had teaching experiences, though no specific training congruent with their Title I assignments. Thirteen percent of the projects reported that they had staff members with some special training relative to their assignment while 20% reported no special training. About 85% of the projects reported having staff which volunteered for the Title I position.

About 1/2 of the directors from projects in the sample for which data were available (36 out of 43) were serving in that position as an added duty. These people were usually administrative personnel. Only 6 projects reported that the directorship was a new position. In the smaller projects, it is considered impractical to have a full-time or even part-time project director who has release time from his regular duties. On the other hand, in many of the projects, administration would be far more effective if directors were either full-time or had an appropriate amount of release time to carry out their administrative responsibilities to the project.

2. *SUPPORTING STAFF.*

If the project employed support staff, such as teacher aides and/or other para-professionals, information on their backgrounds, duties, training, and the way in which they were utilized was gathered.

Fifteen out of 37 projects for which data were available reported no systematic use of support personnel. Outside of teacher aides, personnel associated with psychological services and guidance, and/or health services emerged as the dominant support service used systematically.

Forty-two percent of the projects reported teacher aides and/or other para-professionals as part of the support staff. Mothers or housewives and college students appear to be the primary sources of aides. Forty-four percent of the projects who had teacher aides reported that their primary duties were clerical in nature; 22% of the projects listed housekeeping type activities; and, 76% noted that the aides were assigned to assisting them with instruction. Of the 18 projects reporting, only 7 provided them with any kind of training for their Title I assignment.

In the Commonwealth of Massachusetts, a teacher aide is not permitted to function in an instructional capacity.[1] It is probably for this reason that there is not a very extensive use of teacher aides throughout Title I projects when compared to their rather exentisve use in other states.[2,3]

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[1] Chapter 164 of the Acts of 1965 rules that an instructional or administrative aide (as used in Section 38 of Chapter 71, which it amends) "shall be a person who does no actual teaching, but acts as an assistant to a teacher."

[2] Fifty-two percent of the billion dollars provided by Title I was spent on instruction during its first year. Part of this went into the creation of 180,000 new part-time and full-time professional and sub-professional positions other than teaching. Forty-eight of the fifty-four reporting agencies (state) told of turning to salaried sub-professionals. The First Year of Title I E.S.E.A. 1965, U. S. Office of Education (GPO 1967-0-257-037), 1967, p. v and p. 9.

[3] "Assignments for aides varied widely. Most frequently, aides helped prepare materials, worked with individual students and small groups, supervised class work and group games, corrected papers and performed clerical duties. Many school districts also employed aides to work with reading specialists, community workers, nurses, counselors, librarians, and other specialized personnel. During 1966-67, there were 83,500 teacher aides and 6,100 library aides working in Title I Programs." In 1966-67, California alone hired 4,300 aides for Title I programs. Title I/Year II, U. S. Office of Education (GPO: 1968 0-312-658), 1968, p. 45.

This may account for the reason why there is little training offered to the teacher aides which were hired. Obviously, it takes very little training to perform housekeeping type duties and simple clerical tasks. However, it should be noted that aides are performing in an instructional capacity and should have training.

> *3. STAFF CHARACTERISTICS RELATED TO ABILITY TO ESTABLISH RAPPORT WITH STUDENTS.*
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> *Research in this area has indicated the importance of the capacity of a teacher to establish rapport with disadvantaged youngsters if they are to learn with any degree of efficiency. We therefore gathered information on the teacher's attitude toward the disadvantaged child's learning ability, the Title I project, the school in general, his/her own assessment of capacity in the project, and on the characteristics of the expectations of teachers with regard to pupil performance. In addition, we were interested to see to what extent Title I projects serving different racial or ethnic groups made efforts to provide teachers, aides, or administrators of the project from the same ethnic group as the majority of the children and whether or not Title I staff members lived in areas similar to those of the students whom they were teaching.*

Almost 1/2 of the projects in the sample reported that the question concerning the extent to which Title I staff members reflect the same racial or ethnic group as the student body as inapplicable. In many of the localities, particularly in the smaller communities, there is such a homogeneous population that no ethnic minorities are recognized. Only two of the projects out of the 40 projects from which data were available indicated that a definite effort was being made. As to whether or not project staff members were living in areas similar to those of the students whom they were teaching, many projects reported that this was the case only because the town was small and homogeneous in nature. In larger communities, the employment of teacher aides greatly increased the chance of staff members living in the project area.

In only 3% of the projects for which data were available (36) did teacher attitude toward disadvantaged children's learning ability seem to be a serious barrier to pupil progress.[1] In 14% of the projects observers felt this to be a problem to a certain degree, while in 83% of the projects this was not considered to be a problem at all. Sixty percent of the projects from which data were available (38) had not taken into consideration the fact that expectations of teachers with regard to pupil performance has a definitive effect upon performance levels.[1] Over 37% of the projects felt that this had been taken into consideration. This was one of the major reasons given for having selected the "best" teachers.

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[1] "Project SEAR, a report on the impact of compensatory education on some poverty districts in California, discovered that the poor attitudes and prejudices displayed by some teachers toward their students hampered student achievement. The teachers did not understand the problems facing their students, and the lack of communication resulted, in part, in the failure of the schools to influence the pupils." Title I/Year II, U. S. Office of Education, 1968, p. 43.

On examining the prevailing attitude of Title I teachers toward the Title I project, towards disadvantaged children, the school in general, and his or her own capabilities as a staff member of the project, the response was, generally speaking, extremely positive. Only 5% of the projects from which data were available (38) indicated the presence of some definitely negative attitudes about the project. Even fewer projects reflected a negative attitude towards disadvantaged children. Seventeen percent had some misgivings about the school in general, and no staff member felt negative about his own capabilities in the project, although some 22% of the responses to this question were "noncommittal."

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[1] "May I suggest to you that such attitudes (negative attitudes in regard to giving tests) are particularly harmful with respect to children from culturally disadvantaged backgrounds and may well jeopardize the validity of their test results... These pupils need to feel that in giving tests the teacher is deeply concerned about how well they do, that she wants to have them do their best, that she wants the test information only so that she can help them." Lennon, Roger T., Testing and the Culturally Disadvantaged Child, pamphlet published by the Test Department of Harcourt, Brace, and World, Inc., 1964, p. 12.

4. ATTITUDE OF NON-TITLE I PERSONNEL TOWARD THE PROJECT.

> *In some Title I programs, a cleavage between non-Title I personnel and Title I staff puts the Title I child into a position where he bears the brunt of staff disunity. We were therefore interested in finding out the prevailing attitudes of non-Title I personnel towards the project.*

The prevailing attitudes of non-Title I personnel towards the Title I project were extremely positive. We collected no negative responses. Twenty-two percent of the projects generated responses which could be categorized as "noncommittal" in nature. There tended to be relatively few responses from the personnel of summer projects since non-Title I personnel were not available to express their feelings about compensatory education.

In summary, our experience in the field indicates that, for the most part, Title I project staffs are comprised of devoted educators who have a very positive attitude about the work they are doing.

RECOMMENDATIONS

If programming is to be effective, objectives must be matched by resources adequate to carry them out. If resources are scarce or limited, it is more worthwhile to pick one single objective of high priority and allocate all available resources to achieve it than to spread resources so thinly that nothing is accomplished. Our data indicate that insufficient attention has been given to this problem. We therefore recommend:

(27) THAT WHEN PROPOSALS ARE REVIEWED MORE ATTENTION BE GIVEN TO THE RELATIONSHIP BETWEEN PROGRAM OBJECTIVES AND STAFFING PATTERNS WITH PARTICULAR REFERENCE TO THE NEED FOR FULL-TIME PROGRAM DIRECTORS AND/OR REALISTIC AMOUNTS OF RELEASE TIME, BOTH FOR PLANNING AND IMPLEMENTATION, PARTICULARLY IN THE CASE OF LARGER PROJECTS.

During the last few years some effort to determine the effectiveness of teacher aides has been made. The Bank Street College of Education study identified multiple benefits.[1] Our data indicate that we are deprived of some of those benefits because of legal restrictions placed on the functions of aides. (See footnote 1, page 210.) We therefore recommend:

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[1] The Bank Street College of Education study identifies some 10 to 12 benefits derived from having teacher aides on the staff. Most of them are related to a more effective distribution of resources and a more efficient utilization of time. Other important considerations are concerned with the capacity of the aide, particularly if he lives in the same area and/or shares a similar background to the students with whom he works, to function as a positive role model for the students and to help interpret cross-culturally attitudes and behavior both from teacher to pupil and vice versa. Bowman, Garda W., and Klopf, Gordon J., Auxiliary School Personnel: Their Roles, Training, and Institutionalization, Bank Street College of Education, October, 1966, pp. 4-5.

(28) THAT THE STATE DEPARTMENT OF EDUCATION CONSIDER THE FORMULATION AND INTRODUCTION OF LEGISLATION WHICH WOULD EXTEND THE FUNCTIONS OF A TEACHER AIDE SO THAT THESE KINDS OF SUPPORT PERSONNEL CAN BE MORE EFFECTIVELY USED IN HELPING THE TEACHER TO MANAGE THE TEACHING/LEARNING PROCESS. THESE EXTENDED FUNCTIONS SHOULD CERTAINLY INCLUDE, BUT NOT BE LIMITED TO, READING TO THE CHILDREN, LISTENING TO THEM READ AND CORRECTING THEIR MISTAKES, AND ASSISTING STUDENTS GENERALLY IN WORKING WITH ANY KIND OF PROBLEM, ALL UNDER THE DIRECT SUPERVISION OF THE TEACHER TO WHOM THE AIDE IS ASSIGNED.[1]

Because significant emotional support from staff and attitudes reflective of positive expectations are so critical to the performance of disadvantaged children, having those kinds of attitudes and the capacity to give that kind of support should be an important selection criterion for Title I staff. Although our data do not reveal a critical problem in this area, it still needs to be emphasized and we therefore recommend:

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[1] Several states, such as Illinois, Michigan, Colorado, and California have more functional definitions of the permissible roles of teacher aides which might be examined as possible models.

(29) THAT THE STATE DEPARTMENT TITLE I OFFICE FIND WAYS OF ENCOURAGING PROJECT ADMINISTRATORS TO HIRE MINORITY GROUP MEMBERS FOR TITLE I PROJECTS, PARTICULARLY IN THE CASE OF PROGRAMS SERVING POPULATIONS WHICH INCLUDE SUCH MINORITY GROUPS AND TO GIVE SERIOUS CONSIDERATION TO ATTITUDES TOWARDS THE DISADVANTAGED ON THE PART OF ALL APPLICANTS.[1]

G. PRE-SERVICE AND IN-SERVICE TRAINING

5. DESCRIPTION OF TRAINING OF TITLE I STAFF.

Both pre-service and in-service training of Title I personnel were considered. Specific note was taken as to whether or not teachers had had training which included role playing, microteaching, strength training, and utilization of games in teaching. Information was also gathered on how long the pre-service and in-service training was and who was in charge of it.

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[1] "Teachers' expectations are like self-fulfilling prophecies. Children will achieve what is expected of them. This was borne out by a study made in San Francisco by Prof. Robert Rosenthal of Harvard University. He told teachers that certain of their pupils had a high learning potential, even though some did not. The result was higher teacher expectation and higher pupil achievement at the end of the school year." Title I/Year II, U. S. Office of Education, 1968, p. 44.

Slightly under 1/2 of the projects from which data were available (36) had no pre-service training. A little over 20% of the projects indicated that their pre-service training involved more than a one-day effort, while 31% of the projects reported that their pre-service program was largely geared to orientation towards materials and machines and lasted only one meeting.

Over 50% of the projects for which data were available (36) reported no in-service program. The most frequent in-service activity mentioned was a combination of unscheduled and scheduled meetings which turned out to be administrative in nature most of the time. Only 22% of the projects felt that they had an actual in-service activity that could really be called in-service training. None of the training activities included experience with microteaching, strength training designed to equip teachers to capitalize on their strengths and develop characteristics of patience, stamina, and endurance, etc., and experience in how to utilize games as a means of enhancing learning.

Only two projects out of the sample used role playing as a training device.

RECOMMENDATIONS

According to a 1967 Yeshiva University report to the Civil Rights Commission, only 3% of the 15,000 teachers graduating in 1966 from the ten major institutions that certify public school teachers had received any orientation in teaching disadvantaged children.[1] Yet, it is estimated that 40% of the children in the nation's schools require compensatory education. This general lack of preparation for teaching the disadvantaged is reflected in our data from the sample. This makes pre-service and in-service training all the more important. We therefore recommend:

(30) THAT SCHOOL DISTRICTS BE REQUIRED TO PROVIDE EVIDENCE IN THEIR PROPOSALS THAT STAFF MEMBERS HAVE THE EXPERIENCE NECESSARY TO TEACH IN TITLE I PROGRAMS IN TERMS OF THE OBJECTIVES AND REQUIREMENTS OF THE PROJECT AND/OR THAT ADEQUATE PROVISION IS MADE FOR PRE- AND IN-SERVICE TRAINING;

(31) THAT IN THE CASE OF PROJECTS UTILIZING TEACHER AIDES, THEY RECEIVE TRAINING SPECIFIC TO THE ROLES THEY ARE EXPECTED TO PERFORM, AND THAT TEACHERS BE TRAINED IN HOW TO SUPERVISE AND WORK WITH AIDES;[2]

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[1] Reported in Title I/Year II, U. S. Office of Education, 1968, p. 43.

[2] The Bank Street College of Education study on auxiliary per-

(32) THAT STUDY OF THE EVALUATION OF THE PREVIOUS YEAR'S PROGRAM BE MADE A REGULAR PART OF THE PRE-SERVICE TRAINING OF STAFF MEMBERS OF ANY CURRENT YEAR; AND,

(33) THAT PRE-SERVICE TRAINING INCLUDE DEVELOPING A THOROUGH KNOWLEDGE OF THE EVALUATION ASPECTS OF THE PROJECT AND THE SPECIFIC OBJECTIVES OF THE PROGRAM IN TERMS OF BEHAVIORAL OUTCOMES.

Data collected in response to items listed under Learning How to Learn and Motivational Aspects of the Program indicate that pre-service and in-service training activities did not include a number of very important items which are discussed in those sections. Because of their relevance to pre-service and in-service training, additional recommendations concerning training of compensatory education personnel are presented at the end of Part II.

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sonnel found role definition and role development for aides to be an important factor in the success of programs using aides. Furthemore, training of aides specific to the tasks their roles will require were likewise found to be extremely important.

Bowman, Garda W., and Klopf, Gordon J., Auxiliary School Personnel: Their Roles, Training, and Institutionalization, Bank Street College of Education, October, 1966, pp. 6 - 7.

H. LEARNING HOW TO LEARN--DEVELOPING EFFECTIVE LEARNERS

6. *TEACHING THE PROCESS OF LEARNING.*

> *The essential feature of a good compensatory education program is adequate provision for means that will enable disadvantaged youngsters to become permanently effective learners. This involves learning something about how to learn itself. We were therefore interested in ascertaining whether or not compensatory education programs actually taught or offered experiences which would increase the competence of the learner by enabling him to understand something about the nature of knowledge and recall, techniques for comprehension and transferability of knowledge, how to apply principles, how to analyze and synthesize material, how to perform evaluations of materials, and convergent and divergent thinking.*

While most of the projects in the sample reflected or involved some of the above listed learning processes, no project placed a major emphasis on learning how to learn as such. Virtually all of the projects, both summer and winter, placed an emphasis on recall or memory, that is, students were expected to store and retrieve specific information. However, there is a difference between expecting somebody to remember something and teaching actual ways of increasing the quality of memory and presenting materials in a way which facilitates recall. Projects emphasize the former but neglect the latter. About 75% of the projects from which data were available (28) emphasized comprehension as a requirement on the part of the student. Here again, there was no focus on the capacity of comprehension as such and how to develop that capacity. The same situation was true of all of the remaining items. Around 50% of the projects emphasized application, about 1/3 were concerned with analysis and synthesis, approximately 25% were concerned with evaluation, and less than 1/5 did anything with convergent and divergent thinking in any definitive sense. (See Appendix VI, page 325, for tabulation.)

> 7. *GENERAL SKILLS AND CAPACITIES RELATED TO LEARNING.*
>
> *Attempts were made to identify any part of a given project which focused on the development of any of the following capacities: listening, observing, recording information, attending behavior and increasing attention span, test taking, following directions, effective work and study habits, visual discrimination, vocabulary and word reasoning, speech, information seeking behavior (how to ask questions and where to find information), problem solving, and participation in a group as a member. All of the above capacities are known to contribute to efficiency in learning and therefore should be a part of every well-developed compensatory education program.*

Of the above listed capacities or skills, listening, observing, following directions, vocabulary and word reasoning, and speech were considered by over 50% of the projects from which data were available (33) as being most important. Problem solving, participation in social groups, and information seeking behavior were considered least important. Approximately 25% of the projects considered recording, attending behavior, test taking behavior, study habits, and visual discrimination as important. (See Appendix VI, page 326, for complete tabulation.)

RECOMMENDATION

During the first four or five years of their lives, most middle-class children go through a "hidden" curriculum which provides for them the kinds of basic learning competencies that are prerequisite to successful performance in school.[1] Up to the present time, schools have based their curricula, their teaching methodology, and their grading and incentive systems upon the erroneous assumption that everyone coming into the school has had exposure to that "hidden" curriculum and mastered it reasonably well.

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[1] See, for instance, Basil Bernstein's research on how language, as learned while growing up in the home, structures and conditions what the child learns and how he learns and particularly how this can set limits within which future learning may take place.

Bernstein, Basil, "Social Class and Linguistic Development: A Theory of Social Learning," in Education, Economy, and Society, edited by A. H. Halsey, et.al., Glenco, Illinois: Free Press, 1961.

A child growing up in poverty or semi-poverty will also be exposed to a "curriculum"--one that enables him to survive in his culture, to be sure, but also one that does not provide him with the kinds of learning competencies prerequisite for successful performance in schools as they are currently set up.

In coming to the school situation, he is clearly at a tremendous disadvantage when compared to his more affluent peers. The school then compounds the disadvantage by giving him learning tasks the prerequisites to which he has not yet mastered, thereby setting him up for a guaranteed failure. Being stuck in such an intolerable and unjust position and being forced to accumulate failures over long periods of time generate such negative emotional by-products, all associated with the formal learning situation, that effective learning within the formal context becomes impossible. Since failure in school reduces opportunities for attaining future economic security and continuing growth and development, both socially and personally, the magnitude of this problem approaches incomprehensible dimensions. Its ramifications are far-flung largely because the situation perpetuates itself through a cycle that is difficult to interrupt.

There are approximately 15 million children who find themselves locked in a system that is not only not helping, but in many cases making things worse. Compensatory education emerged as the answer to the problem. This kind of education is supposed to "compensate" for the missed "hidden" curriculum. The tendency has been to cast compensatory education into a remedial mold or put it in the form of general enrichment activity. Both of these have their place, but if they do not focus on the task of developing competent learners, they are apt to have very little permanent or even short-term effects.[1,2] Our data indicate that Title I programs in Massachusetts are similar to the variety of compensatory education programs that do not focus on developing competent learners and which are therefore not being maximally effective. We therefore urge that the following recommendation be regarded as urgent and critical:

(34) THAT THE STATE DEPARTMENT TITLE I OFFICE MAKE THE DEVELOPMENT OF EFFECTIVE AND COMPETENT LEARNERS THE REQUIRED MAIN OBJECTIVE OF ALL TITLE I PROGRAMS AND THAT LOCAL PROJECTS BE GIVEN ASSISTANCE IN TRANSLATING

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[1] For a more critical look at Title I, see Robert Dentler's article, "Urban Eyewash: A Review of 'Title I/Year II'" in The Urban Review, vol. 3, no. 4, February, 1969, pp. 32-33.

[2] A study of 132 schools receiving Title I funds showed no improvement in achievement on the part of pupils, though again there were evaluation and data collection problems. See Mosbeck, E. J., et.al., Analyses of Compensatory Education in Five School Districts, TEMPO, General Electric Company, Santa Barbara, California, March, 1968. Report is available through the U. S. Office of Education.

THIS MAIN OBJECTIVE INTO SPECIFIC BEHAVIORAL OBJECTIVES RELEVANT TO THEIR OWN PROGRAMS.

Since the data discussed in this section have implications for pre-service and in-service training, establishing of program objectives and planning, additional recommendations relative to the topic of this section appears at the end of Part II.

I. MOTIVATIONAL ASPECTS OF THE PROGRAM

8. INDIVIDUALIZED PRESCRIPTIONS FOR LEARNING.

In order to avoid setting children up for failure it is essential to know where they are and to make individualized prescriptions for learning consistent with their present status. We were therefore interested in having information on whether or not such individualized prescriptions for learning were made, how they were made, whether or not there was an emphasis on the strengths or weaknesses of the pupils and whether or not consideration was given to the interests of students.

Eighteen of the projects from which data were available (40) made efforts to individualize prescriptions for learning. A wide variety of ways for making such prescriptions were reported ranging from intuitive judgment and trial and error to the more formal means of diagnostic testing. Thirty-seven percent of the projects identified weaknesses and/or strengths of students so that the program could be geared to either or both.

Again, the means whereby this was achieved varied from informal intuitive judgments about weaknesses and strengths to more formal means of diagnostic testing. In certain cases the weaknesses were very evident, as in the case of a child who does not speak English or one who cannot read. For the most part, project personnel found it easier and/or more convenient to identify weaknesses and work with those rather than ascertain strengths and find ways of building on those strengths and relating them to areas of weakness in such a way that they might be overcome.

Generally speaking, people prefer doing those things which they can do best and would prefer to avoid doing those things which they do not do well. There are, therefore, many more favorable implications in regard to building on strengths than dealing directly with weaknesses, though no doubt a combination of some kind is essential. When staff members who indicate that they used the approach of building on strengths were asked in what way they identified strengths and how they built on them, explanations were vague and non-specific.

Twenty-five percent of the projects felt that they had given special consideration to the interests of children in determining the bulk of the learning activities. Again, interest has many implications for motivation and since disadvantaged children often feel themselves to be unmotivated in formal learning situations, giving consideration to student interests has a great deal of importance. (See Appendix VI, page 327, for data summary.)

9. BASIS FOR CURRICULUM PREPARATION.

> *Motivation has been found to be in part dependent upon the relevance of curriculum materials from which students must learn. We were therefore interested to know whether or not and to what extent the curriculum for the program was planned to be consistent with students' environments, experiences, abilities, and interests. We also looked for evidence of specific favorable verbal and non-verbal reference to racial and cultural minority groups within the materials and teaching techniques employed.*

Approximately 1/3 of the projects from which data were available (34) felt that consideration had been given to planning the curriculum so that it would be consistent with the child's environment. Specific explanations of how this was done were rare and most project personnel felt a little bit at a loss as to how it might be done. In essence, it is the matter of having teachers of compensatory education becoming familiar with the cultural world of the child and starting where he is rather than expecting the child to climb out of his cultural world and adjust on his own to the middle-class culture of the school.

A little over 1/3 of the projects felt that the experiential background of students was considered when the curriculum was planned. Here again, concrete examples were not plentiful and discussion with staff members revealed some difficulty in understanding how this might be done extensively. To be certain, this is not an easy question, but on the other hand, if a specific learning task is given to a student without regard to how that task is consistent with his experiential background, the student may not have yet mastered the prerequisites to that task and then will find himself set up for a guaranteed failure--the typical experience of the disadvantaged youngster. Matching experiential backgrounds of children to learning tasks is critical in compensatory education.

Seventy-two percent of the projects considered that abilities were taken into consideration when the curriculum was designed. Given the nature of Title I programs in general, one would expect this percentage to be as high or higher than it is. Over half of the projects reported that interests of children had been considered when planning the curriculum, although no indications were given as to how interests were inventoried. The major exception to this was during a few summer projects when some students actually had a say in determining what would be done during some components of the project. For instance, in a few projects where sports were clearly of great interest to students, they were allowed to determine what sports activity would be undertaken. In other cases, a wide variety of activities was predetermined by the staff, but students were allowed to choose which ones of the ones available they would like to participate in.

Children from minority backgrounds frequently have motivational problems because there is little in the environment or in the curriculum materials which confirms and supports their identity as members of a minority group. Seventy-four percent of the projects from which data were available (31) lacked any significant favorable reference to ethnic minorities in their curriculum materials. Sixteen percent indicated some inclusion of favorable materials in books, particularly in illustrations. Three percent of the projects used pictures on the wall depicting persons from different racial backgrounds, and around three percent employed teachers who were from minority backgrounds themselves. Approximately 6% actually taught courses which focused on the history or culture of an ethnic minority. In many cases the population being served by the Title I project was not multi-ethnic and so project staff members felt it unnecessary to be concerned about this issue. In a few cases, teachers actually expressed a desire to have students from a different minority group visit their classes. (See Appendix VI, pages 328-330, for data summaries.)

10. PRESENTATION MODE UTILIZED IN INSTRUCTION.

> *Since research evidence indicates that the following presentation modes facilitate learning, we inquired as to whether or not projects made provision for them:*
>
> *Organization of material in short, sequential steps as needed;*
>
> *Continuous and immediate success experiences with immediate feedback being viewed as an important reinforcer;*
>
> *Adequate evaluation of where the child is at any given point and his readiness for the next step;*
>
> *Use of the "saturation approach" (repetition, summarization, alternative explanations, and the use of connecting links with different contexts); and*
>
> *Multi-media presentations.*

Eighteen out of 20 summer projects from which data were available and 11 out of 12 winter projects from which data were available had evidence that in subjects where appropriate, material was broken down into short, sequential steps in order to facilitate learning. Around 57% of the projects, both summer and winter, felt that they provided for continuous and immediate success experiences at least in some aspect of the program. In many cases this approach was limited to a small portion of the time that the child was actually engaged in Title I activities. Of course, certain kinds of subject matter lend themselves with greater facility to the provision of reinforcing feedback at appropriate times. Forty-five percent of the projects evaluated the child after each step in order to determine readiness for the next step in at least one or more aspects of the project. Thirty-seven percent of the projects used a saturation approach involving repetition, summarization, and alternative ways of explaining things at least during one or more aspects of the program. Though a fair percentage of the projects included one or more of the above presentation modes, nonetheless, observers reported that there was little extensive and systematic use of them which, for the most part, have been demonstrated to be very effective, if not essential, when working with disadvantaged youngsters. (See Appendix VI, page 329, for tabulation.)

11. HANDLING OF FRUSTRATION AND FAILURE.

Many disadvantaged youngsters have a background of failure which figures strongly in present frustrations with learning. The distribution of rewards and punishments can have a direct effect on reducing or increasing frustration and failure. Inquiry was made as to whether or not projects had adopted a consistent policy concerning reward and punishment, whether or not the project capitalized on student interests as a means of fostering motivation, and whether or not activities were arranged so that children could experience a sense of mastery and achievement (competency motivation) and consolidate gains made in this direction by having the opportunity to apply what was learned.

Seventy-four percent of the projects from which data were available (33) indicated that efforts were made to capitalize on student interests as a means of counteracting patterns of frustration and failure, although specific ways of ascertaining student interests were not formalized nor consistent. A conscious use of reward and punishment as a means of increasing motivation was employed by approximately 55% of the projects. Here again, however, much of the application of the principles of reward and punishment was based on "common sense" and intuitive judgments rather than upon any knowledge based upon research findings. A third of the projects indicated that efforts were made to insure that children felt a mastery over what they were doing as a means of increasing what has been called "competence motivation." For the most part, however, this was not incorporated into the program in any systematic way over long periods of time so that a child would receive a growing sense of mastery over a wide variety of subject matter areas or skill areas in a way in which he would be conscious of it to the degree necessary to insure a competence motivation (See Appendix VI, page 331, for tabulation.)

12. *SELF-IMAGE.*

During the last several years, self-image has emerged as a useful conceptualization of how a person

> *regards himself and how that self-regard in turn determines behavior. Since so many recent efforts in compensatory education have dealt with "improvement of self-image" as an objective of compensatory education, we gathered information on the extent to which projects made any attempt to analyze the self-concepts of children and whether or not there were specific aspects of the project which were planned as appropriate means for developing healthier self-concepts (such as systematic use of role models or systematic use of a variety of reinforcements following achievement on any level).*

Out of 34 projects from which data were available, three summer projects and six winter projects made attempts to analyze student self-concepts. On the one hand, since improvement of self-image was such a predominant objective, this is difficult to understand. On the other hand, since there are very few effective analytical tools for determining or measuring self-concept, it is understandable that projects would hesitate to attempt such analysis. Eight summer projects and five winter projects indicated that particular aspects of their programs were especially important for improving children's self-concepts. There were a wide range of responses as to what aspects these were, but most of them had to do with having learning experiences in which they did not feel "rejected" but in fact felt that they were accepted and that they experienced warm and supportive staff. Some project personnel felt that it was most important for a child to develop an "I can" kind of attitude and that this would be the best thing for the improvement of self-image. However, observers noted little theoretical orientation to the subject of self-image and a lack of awareness of what research has been done in this area (though admittedly there remains much to be done).

Less than 1/4 of the projects from which data were available (36) made any systematic or specific use of role models to assist students in learning. Where this was considered, responses usually centered around the fact that teachers whom students admired and gravitated toward naturally were selected to be on the Title I staff because they were felt to be good teachers as well as good role models. One project actually incorporated a number of normal achievers to serve as role models. However, in no project was the idea of using role models a deliberate or prominent feature of any aspect of the program. (See Appendix VI, page 332, for tabulation.)

13. LEVELS OF INVOLVEMENT.

It has been found that learning on the part of the disadvantaged can be greatly facilitated if they do not have to remain passive recipients of information but in fact can become involved in doing things. For this reason, we were interested to ascertain whether or not projects employed means of involving youngsters and making *them more active participants in the learning process through games, dramatics, role playing, and use of peers as teachers.*

Twenty-nine percent of the projects from which data were available (37) used none of the above mentioned means of enhancing learning. Sixty-four percent of the summer projects and 40% of the winter projects used various kinds of games; 16% of both winter and summer projects used dramatics of some kind as a means of enhancing learning in at least one or more aspects of the program. Role playing, utilizing students as teachers of peers, and multi-media presentations were used in less than 15% of the projects, summer and winter taken together. (See Appendix VI, page 334, for tabulation.)

14. SPECIAL INSTRUCTIONAL MATERIALS.

The individualization of instruction can be facilitated by the use of a wide variety of different instructional materials and equipment. Information was gathered as to the kinds of special instructional materials and equipment that was available, whether it was utilized or not, what was being locally developed, and whether or not project personnel had access to facilities for creating overheads, film strips, still photos and slides, moving films, tape recordings, and videotapes.

Practically all of the projects used a wide variety of special materials. Over 92% of the projects from which data were available (36) had special materials available and all but 3% of those used them regularly. Twenty-two percent of the projects had locally developed special instructional materials. It is interesting to note that more summer projects than winter projects used special instructional materials. Winter projects tended to have materials available and access to equipment; however, they appeared to be used less frequently than in summer projects. Sometimes the special materials and equipment used by the summer staff would tend to be stored during the winter time when a different staff took over the winter project. Observers also noted that sometimes it was difficult for summer projects to locate project equipment used during a previous summer. Locally made items included slides, still photos, games, work sheets, films, and audio tapes. (For a fuller tabulation, see Appendix VI, pages 335-337.)

15. CLASS SIZE AND CHARACTERISTICS.

A smaller class size can facilitate the individualization of instruction. Therefore, we collected data on class size and pupil/teacher ratio. We were also interested to see whether or not classes were ethnically integrated since studies have shown that integration facilitates

> *learning on the part of minority groups, but does not depress learning of the majority.*[1]

There was a wide variety of arrangements made in regard to class size and teacher/pupil ratio. In some cases, for instance, a teacher aide or two would be added. In other cases, there would be small group activity in a corner of a room supervised by the teacher who was also directing another group in another corner of the room. Thus, the same project may use both very small and very large classes depending upon the activity or the need. There were cases noted, however, where lower ratios were not used effectively. Summer projects appeared to be far more flexible in regard to teacher/pupil ratios and class size than winter projects.

In general, compensatory education classes reflected a consideration for the value of individualizing instruction and therefore the need to have classes as small as might be possible. The average class size reported by most projects was between 10 and 13 students. (See Appendix VI, page 336, for detailed breakdown.)

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[1] Coleman, James S., Equality of Educational Opportunity (better known as The Coleman Report) U. S. Office of Education, 1966.

RECOMMENDATIONS

Individualization of instruction is one of the most basic responses to the need for disadvantaged children to achieve at a rate above the norm. Much of the Title I instruction, particularly in the summer projects, reflected an acceptance of this principle. It was also evident that the State Department Title I Office had made efforts to hold the line on numbers of children being served so that teaching efforts could be individualized as much as possible and not diluted to a point where the teaching approach could not take individual pupil needs into consideration. However, more encouragement for improving the quality of individualized instruction is needed. Few teachers have been trained to teach on this basis; yet, to be effective in the approach, techniques different from those used in teaching larger classes must be employed. We therefore recommend:

(35) THAT AN INCREASED EMPHASIS BE PLACED ON THE INDIVIDUALIZATION OF INSTRUCTION, PARTICULARLY DURING THE WINTER PROJECTS, AND THAT INCLUDING INFORMATION AND PRACTICA ON HOW TO INDIVIDUALIZE INSTRUCTION BE ENCOURAGED AS PART OF PRE-SERVICE AND IN-SERVICE TRAINING OF TITLE I STAFF.

The motivational and cognitive needs of disadvantaged youngsters have direct implications for both curriculum development and teacher training.[1] Our data show that the many considerations related to these needs (as discussed in Sections H and I) are familiar to most Title I personnel, but not thoroughly enough to be translated into curricular changes and teaching methods that are maximally effective. It is certain that the level of competence required to achieve the objectives of compensatory education cannot be attained through a few workshops and/or several hours of pre-service or in-service training.[2] However, until long-term training programs are developed by universities[3] (which have only begun to assume this critical responsibility) an improved short pre-service training will have to suffice.[4] We suggest:

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[1] See Ausubel, David P., "A Teaching Strategy for Culturally Deprived Pupils: Cognitive and Motivational Considerations," School Review, Winter, 1963.

[2] The range of needs of disadvantaged children presents a challenge that is more complex and difficult than the needs most physicians encounter in their patients. Yet no one expects a physician to deal with his patients thirty at a time with only three days pre-service training.

[3] See the Section on Model Training Program for compensatory education personnel in the summary section, Blueprint for Action, page , for details on long-term training.

[4] A group of researchers at Arizona State University studied changes in attitudes of educators toward disadvantaged children before, during, and after special in-service training. Teachers who experienced the Title I training changed favorably toward

(36) THAT THE STATE DEPARTMENT TITLE I OFFICE, POSSIBLE IN COLLABORATION WITH PRIVATE OR PUBLIC INSTITUTIONS CONCERNED WITH EDUCATION OF THE DISADVANTAGED, PROVIDE ASSISTANCE TO LOCAL PROJECTS IN DEVELOPING CURRICULA THAT ARE BASED ON STUDENT NEEDS, INTERESTS, AND EXPERIENTIAL BACKGROUND SO THAT MAXIMUM MOTIVATIONAL SUPPORTS ARE PRESENT WITHIN THE CURRICULUM; AND,

(37) THAT PROJECT PLANNERS AND DIRECTORS BE ENCOURAGED TO CONSIDER THE MERITS OF THE VISUAL ARTS, MUSIC, DANCE, AND THEATRE ARTS AS A MEANS OF MAINTAINING HIGH LEVELS OF INTEREST AND MOTIVATION, FOSTERING COGNITIVE AND PERCEPTUAL GROWTH, AS WELL AS DEVELOPING AESTHETIC SENSITIVITY.[1]

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these children while control group teachers maintained unfavorable attitudes. This is positive evidence of the worth of training geared to meet special needs. For more details, see Title I/ Year II, Second Annual Report of Title I, U. S. Office of Education, 1968, p. 118.

[1] The Center for the Study of Aesthetics in Education at the University of Massachusetts, Amherst, is currently engaged in the development of a curriculum which is based on art experience and its relationship to cognitive and affective growth. The Title III (PACE) program at Attleboro, Massachusetts, directed by Mr. Donald Brigham, is an outstanding example of the way in which involvement in art activities can support motivation for learning at high levels.

Since relevance of materials is a supportive factor in sustaining motivation, children who belong to minority groups must be able to identify with some aspects of the subculture from which they come as represented in curriculum materials. Given the diversity of the people comprising our society and our commitment to democracy, such representation is also relevant to children who do not belong to a minority group. We therefore recommend:

(38) THAT LOCAL PROJECTS BE ENCOURAGED TO INVEST IN READING AND VISUAL MATERIALS THAT MEANINGFULLY REPRESENT MINORITY GROUPS, WHETHER OR NOT THERE ARE MINORITY GROUP MEMBERS PRESENT IN THE PROJECTS OR ON PROJECT STAFFS.

J. PARENTAL, HOME, AND COMMUNITY INVOLVEMENT

16. PARENTAL SUPPORT.

Studies have shown that significant individuals in the lives of students, especially family members, have an important influence upon their learning in school. We were therefore interested in whether or not projects recognized the nature of this influence and whether or not they had a program designed to involve parents and, if so, the nature of this program.

Of the 34 projects responding, 21 or 62% had not identified and recognized the influence of significant individuals in the lives of Title I students. Of the 12 positive responses, at least 7 referred to parents or family. One specifically mentioned identifying a non-family person and asked him to counsel with the student in question. Other projects were sensitive to problems in the lives of students who came from broken homes or who had one or no parents. However, no project in the sample from which data were available conceptualized a portion of its program on the importance of family members and their influence on academic performance of students.

In over 1/2 of the projects from which data were available (29) parents were not actively involved. We did not regard granting permission for children to participate in the program as active involvement on the part of the parents.

Three of the most frequently mentioned activities involving parents were: (1) general volunteer work within the project, (2) parents as teacher aides within the project, and (3) as field trip assistants.

For the most part, parental involvement was minimal, and when it was present, it was not too imaginative. Given what is known at the present time about the importance of family and community involvement in the education of disadvantaged children, this finding is disappointing.

Services offered to parents seemed to be of the usual school type (PTO activities, parent-teacher conferences, etc.)

which have proved unsuccessful with parents of disadvantaged youngsters--people who, in general, probably did not succeed in school themselves. Only one project reported a service that offered counseling to parents and four projects mentioned home visits. In general, working with parents was a neglected, though potentially important part of most programs.

17. COMMUNITY SUPPORT.

> *Since the progress of a child in school is in many cases also directly related to his connections with other parts of the community in which he lives, we were interested to find out the nature and extent of community involvement in compensatory education programs. We inquired specifically as to whether or not any given program had a referral service whereby theachers and/or other project staff, recognizing certain problems or deficiencies among students, could call upon other agencies for assistance (such as welfare agencies, charitable institutions who could provide clothing, clinics to provide medical attention, dental care, glasses, etc.). In this connection we were also interested to find out whether or not any program made provision for maintaining adequate nutritional status of students.*[1]

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[1] It is noteworthy that the National Advisory Council on the Education of Disadvantaged Children still regard nutrition of Title I children as an unmet need, in spite of the fact that the largest expenditure of Title I "health" funds was for free lunches. See Title I E.S.E.A: A Review and a Forward Look - 1969, Fourth Annual Report of the Council, 1969, p. 46.

In response to an inquiry about the nature and extent of community involvement in the project, approximately 2/3 of the projects from which data were available (33) indicated no community involvement. Three projects mentioned involvement of the Community Action Agency. Local social agencies were mentioned by 6 of 19 projects responding positively. Their basic function was to aid in recruitment and to make or accept referrals. Basically, this indicates only a peripheral involvement. Three projects mentioned utilization of volunteers from within the community.

Half of the projects had no reported referral service mechanism within their Title I project. Positive answers to the question on referral services were highly varied and included such items as: social workers, mental health agencies, high school counselors, testing by local agencies, language clinic, hospital, school nurse, medicare, and dental clinics. Observers reported that referral was a relatively rare and isolated occurrance and that extensive referrals as a systematic part of the program were unusual.

As to whether or not projects drew on community agencies to help insure a sound nutritional status of students, most projects, particularly summer ones, provided snacks, milk, or juice. One project served breakfast while three served lunch and others provided lunch and snacks. In many cases, food and snacks were not provided from Title I funds. One project provided students with medical exams, but other than this there was no systematic effort to determine the precise nutritional status of students, nor an effort to decide what should be done in terms of food supplements or vitamin supplements. (See Appendix VI, page 340, for data summary.)

RECOMMENDATIONS

The American Institutes of Research in a study designed to identify features of a "successful" compensatory education program listed active parental involvement as one very important factor.[1] Research has also demonstrated the influence of significant others, particularly parents, can have on school performance. Our data show a need to strengthen this aspect of Title I programs. The trend to increase parental and community involvement because of their promise for supporting educational objectives effectively is consistent with our recommendation:

(39) THAT PROJECT PLANNERS BE ENCOURAGED TO INVOLVE PARENTS AND COMMUNITY IN TITLE I PROJECTS TO A MUCH GREATER DEGREE THAN PRESENTLY EXISTS AND THAT PROPOSALS BE REQUIRED TO SPECIFY THE NATURE OF INVOLVEMENT ON ALL

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[1] Title I - E.S.E.A: A Review and a Forward Look - 1969, Report of the National Advisory Council on the Education of Disadvantaged Children, 1969, p. 23.

LEVELS: PLANNING, IMPLEMENTATION, AND EVALUATION;

(40) THAT SCHOOL DISTRICTS BE ENCOURAGED TO CONSIDER EDUCATIONAL AND SOCIAL SERVICES FOR PARENTS AS PART OF THE TITLE I PROGRAM AND THAT SUCCESSFUL EFFORTS IN THIS AREA BE DISSEMINATED TO OTHER PROJECTS; AND,

(41) THAT PROJECT DIRECTORS BE MADE RESPONSIBLE FOR DISSEMINATING INFORMATION ABOUT THEIR PROJECTS TO PARENTS AND APPROPRIATE COMMUNITY AGENCIES ON A REGULAR BASIS.

GENERAL RECOMMENDATIONS

If we were to characterize the status of compensatory education in the State in a few phrases, we would say that it has seen worse times, it's getting better, and that we are at a stage of development when it is propitious to mobilize the impressive resources of the State and push for a dramatic improvement of compensatory education based on the considerable experience that has been gained over the last several years.

Given the magnitude of the educational problems facing disadvantaged youngsters and the fact that deficits accumulate rapidly with passing time, it is imperative for methods of compensatory education that are highly successful to be identified[1] as soon as possible and then be put into operation, by providing adequate rewards and incentives,[2] in localities where evaluation demonstrates that little success is being achieved. Identifying such approaches may require a greater investment of resources initially but will pay off in the long run.

In this connection it is important to bear in mind at least two basic criteria for program success:

(1) That students achieve at a rate above the norm, and

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[1] In Appendix A of the Fourth Annual Report on Title I - 1969, the National Advisory Council on the Education of Disadvantaged Children presents an example of comparisons made of successful and unsuccessful programs. They conclude, tentatively, that the undoubted success of selected programs was "based chiefly on clearly defined objectives; teaching limited by these objectives; a reduction of competing stimuli; carefully trained teachers; and, a small group approach."

[2] Providing rewards and incentives for model programs is consistent with the National Advisory Council's recommendation that "the U. S. Office of Education should explore both administrative and legislative means of rewarding well-designed, successful programs and providing incentives for their expansion and implementation by other schools." Page 5 of the 1969, Fourth Annual Report on Title I. See also the recommendation concerning provision of incentives by the state to school districts (Willis-Harrington Report) Quality Education for Massachusetts, The General Court of the Commonwealth of Massachusetts, 1964, page 43.

(2) That students receiving compensatory education exhibit achievement levels statistically significantly higher than a comparable control group which does not have the compensatory treatment.

Anything less than this will be an indication of program ineffectiveness.[1]

On the basis of this rationale, we feel the great need for the development of four kinds of models: Teacher Preparation Models; Evaluation Models; Curriculum Models; and, Models of Actual Compensatory Education Programs. We therefore recommend:

(42) THAT THE STATE DEPARTMENT TITLE I OFFICE COLLABORATE WITH THE BOARD OF HIGHER EDUCATION, SELECTED INSTITUTIONS OF HIGHER LEARNING, AND PROMISING SCHOOL DISTRICTS IN THE DEVELOPMENT OF SEVERAL CAREFULLY DESIGNED COMPENSATORY EDUCATION MODELS WHICH CAN BE RIGOROUSLY EVALUATED[2] AND RESULTS FROM WHICH CAN BE

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[1] The American Institutes of Research under a contract with the National Advisory Council on Education of Disadvantaged Children compared successful and unsuccessful programs. They held that "an improvement in achievement scores was not considered sufficient by itself to identify a 'successful program.' The achieved gain had to exceed that made by a control group over a comparable period of time, or that to be expected on the basis of normative data, and had to be statistically significant." Title I - E.S.E.A: A Review and a Forward Look - 1969, Fourth Annual Report of the National Advisory Council on the Education of Disadvantaged Children, (GPO 1969 0-331-372), 1969, p. 20.

[2] We refer here to the kind of evaluation specified by Edward

DISSEMINATED TO OTHER PROJECTS. SUCH MODELS SHOULD BECOME DEMONSTRATION CENTERS WHERE STUDENT TEACHERS MAY BE TRAINED AND WHERE SITE VISITS MAY BE MADE BY THOSE WORKING IN COMPENSATORY EDUCATION;[1]

(43) THAT IN ORDER TO MEET A CRITICAL MANPOWER SHORTAGE IN COMPENSATORY EDUCATION, THE STATE DEPARTMENT OF EDUCATION, IN COLLABORATION WITH SELECTED INSTITUTIONS OF HIGHER LEARNING AND PUBLIC SCHOOL SYSTEMS, GIVE TOP PRIORITY TO THE ESTABLISHMENT OF MODEL PROGRAMS, BOTH PRE-SERVICE AND IN-SERVICE, FOR TRAINING A VARIETY OF COMPENSATORY EDUCATION PERSONNEL; THAT THESE PROGRAMS BE BASED ON UP-TO-DATE RESEARCH

A. Suchman, in "Evaluating Education Programs," *The Urban Review*, vol. 3, no. 4, February, 1969, pp. 15-16. "The key conceptual elements in a definition of evaluation from a methodological point of view are (1) a planned program of deliberate intervention, not just any natural or 'accidental' event; (2) an objective or goal which is considered desirable or has some positive value, not simply whatever change occurs; and (3) a method for determining the degree to which the planned program achieves the desired objective. Evaluative research asks about the *kind* of change desired, the *means* by which this change is to be brought about, and the signs according to which such change can be recognized." See also, by the same author, *Evaluative Research: Principles and Practices in Public Service and Social Action Programs*. New York: Russell Sage Foundation, 1967.

[1] This recommendation is consistent with recommendation b and c of The Willis-Harrington Report, p. 43.

FINDINGS CONCERNING LEARNING AND THE KINDS OF EXPERIENCES THAT ARE PREREQUISITE TO THE DEVELOPMENT OF COMPETENT LEARNERS, PARTICULARLY AS THESE EXPERIENCES RELATE TO THE DISADVANTAGED; THAT THEY INCLUDE MODEL COMPONENTS ON EVALUATION AND CURRICULUM; THAT THE PROGRAMS BE SELECTIVE IN WHOM THEY ADMIT AND RIGOROUS IN EXTENT AND DEPTH OF TRAINING; AND, THAT THEY BE CAREFULLY EVALUATED.[1]

With so many unforeseen and uncertain contingencies on which federal funding rests, we recommend:

(44) THAT THE STATE DEPARTMENT OF EDUCATION BEGIN TO ENCOURAGE SCHOOL DISTRICTS TO ASSUME PROGRESSIVELY MORE RESPONSIBILITY FOR FINANCING COMPENSATORY EDUCATIONAL SERVICES AS A PART OF THEIR REGULAR SCHOOL BUDGETS.[2]

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[1] Please see the section on "Model Training Program for Compensatory Education Personnel" contained in Blueprint for Action, the summary chapter of this document, for a reasonably well detailed specification of a suggested model.

[2] Some school districts have already begun to do this. Some 15% of the local districts increased their 1967-68 regular budgets to support programs initiated by Title I expenditures. (This figure was taken from the State's report to USOE. See paragraph 10 Source of Funding for information gleaned from our data.)

Our survey data indicate that there are over 30,000 children in the Commonwealth who need compensatory services but aren't getting them. This represents a growing liability to the State which will be a far more costly problem to deal with when these children become adults. We recommend:

(45) THAT LEGISLATION BE ENACTED TO APPROPRIATE STATE FUNDS TO SUPPLEMENT THE FEDERAL FUNDS FOR OVER 30,000 CHILDREN NEEDING COMPENSATORY SERVICES WHO ARE NOT NOW RECEIVING THEM AND FOR SETTING UP PROGRAMS TO TRAIN EVALUATION SPECIALISTS AND COMPENSATORY EDUCATION PERSONNEL.

Many programs have similar objectives and problems. Without exchange of information among them, there is a duplication of effort and an unnecessary repetition of unsuccessful approaches. We therefore recommend:

(46) THAT THE STATE DEPARTMENT OF EDUCATION HELP TO PROVIDE A GREATER DEGREE OF COORDINATION AMONG ALL COMPENSATORY EDUCATION PROGRAMS (HEADSTART, FOLLOW THROUGH, UPWARD BOUND, TEACHER CORPS, NEIGHBORHOOD YOUTH CORPS, ETC.) THOUGH SUCH MEANS AS DISSEMINATION OF INFORMATION, SPONSORING CONFERENCES, AND WORKING DIRECTLY WITH THE DIFFERENT PROGRAMS TO BRING THEIR PERSONNEL TOGETHER FOR CONSULTATION ON MUTUAL PROBLEMS.

Our data show that most of the Title I programs include children in the early grades. On the strength of many research findings which point out how certain early experiences are crucial to later learning, we believe that even more emphasis should be placed on reaching the very young. We therefore recommend:

(47) THAT THE STATE DEPARTMENT OF EDUCATION ADOPT A GENERAL POLICY OF GIVING PRIORITY TO PREVENTION OF LEARNING DIFFICULTIES RATHER THAN ON REMEDIATION AND THAT CONCRETE STEPS BE TAKEN TO EXPAND PRE-SCHOOL PROGRAMS AND THE TRAINING OF SPECIALISTS IN EARLY CHILDHOOD EDUCATION.

Finally, because such study documents as this are frequently filed and forgotten after a short time, we recommend:

(48) THAT THE STATE DEPARTMENT OF EDUCATION SET A DATE FOR AN ANNUAL REVIEW OF THE ABOVE RECOMMENDATIONS UNTIL THOSE WHICH ARE FOUND TO BE BOTH ACCEPTABLE AND FEASIBLE ARE CARRIED OUT AND THAT SOME APPROPRIATE OFFICE OR AGENCY BE CHARGED WITH THE RESPONSIBILITY OF THE REVIEW.

PART III: SUMMARY OF FINDINGS FROM ANALYSIS OF SURVEY DATA

Data were collected from 173 school districts representing 302 compensatory education projects. This represented a 70% return on the survey forms sent out. The response rates from school districts by Standard Metropolitan Statistical Areas were as follows:

A (largest)	B	C	D	E (smallest)
79%	89%	74%	63%	55%

One hundred and forty school districts out of 247 fall into category "C." The average response rate was a little over 70%.

One of the primary purposes of the survey was to provide a cross-check on data gathered by interviews and observations from the 10% random sample. Selected data summaries taken from the survey forms may be found in Appendix IX, beginning on page 332. The frequency tabulations of project characteristics presented below appear in the order of the items relative to those characteristics on the survey questionnaires. (See Appendix IV, page 299.)

DATA FROM SCHOOL DISTRICTS

1. Number of Disadvantaged Students Served: The unduplicated count of disadvantaged children being served by all projects (counted by districts) was 70,047 (N = 173 districts). Projecting from this figure on the basis of a 70% return, the total number of children being served in the State would come to a little over 100,000. This is consistent with the State Department's figure of 103,000.

2. Number of Disadvantaged Students in Districts: The total number of disadvantaged students reported in the 173 districts was 95,623. On a projected basis from a 70% sample, this would come to around 138,000 in all districts. This may be a slightly inflated estimate since more larger districts than smaller districts sent in reports and larger districts tend to have proportionally larger concentrations of disadvantaged students. The questionnaire used by the Willis-Harrington investigators produced an estimate of 40,000 disadvantaged students in the State. At that time (1965), 108 districts reported no culturally disadvantaged children (36% of the respondents). They concluded, "It would appear that there are many children who have educational handicaps who could benefit from programs of compensatory education but who remain pres-

ently unidentified."[1] For comparative purposes, we used the same definition they did when collecting data from the same sources. It appears that today many more of these children are being identified. The estimate, based on reports from districts, is that about 35,000 children who need compensatory services are not getting them (about 25%).

3. Total Number of Children in Districts: The total number of children in the 173 districts came to 917,017. The disadvantaged represent a little over 10% of the total number. This is somewhat lower than the lowest national estimate of 15%.

4. University Assistance: Universities were used most frequently for providing in-service training and assistance with evaluation and least often for assistance in determining budgets. (See data summary, page 352, for complete breakdown.)

5. Weaknesses of Compensatory Education Programs: In reporting weaknesses of compensatory education programs, the two weaknesses

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[1] Quality Education for Massachusetts: An Investment in the People of the Commonwealth, Final Report of the Massachusetts House Special Commission Established to Make an Investigation and Study Relative to Improving and Extending Educational Facilities in the Commonwealth; Hon. Kevin B. Harrington, Chairman; Benjamin C. Willis, Executive Director; June, 1965, p. 294.

most frequently mentioned were inadequate funding and the fact that too few children were being served. (See data summary, page 353, for complete tabulation.)

6. Strengths of Programs: In response to a request for opinions on the two greatest strengths of the program, individual or small group teaching and dedicated, cooperative staff were most frequently mentioned. (See data summary, page 355.)

7. Types of Assistance Needed from State Department: Excluding heavier funding, districts most frequently listed assistance in evaluation and consultation and in-service training as the kind of help they felt not now available from the Title I Office but which is badly needed. Needing better communication among projects also ranked high on the list. (See data summary, page 357, for complete breakdown.)

8. Assistance Needed from Universities: The three kinds of assistance districts felt were most needed from universities and colleges and which were considered not now readily available were, in order of frequency: consultation on research and evaluation procedures, specific teacher training or in-service training, and provision of various kinds of professional advice or assistance. (See Appendix IX, page 359, for complete tabulation.)

DATA ON PROJECTS WITHIN DISTRICTS

9. Project Types: Title descriptions of projects were collected and tabulated. (See Appendix IX, page 361, for tabulation.) As noted before, the heaviest emphasis is in reading and language arts. Categories for tabulation were taken from the NEEDS-NESDEC Title I study and slightly modified for our purposes.

10. Source of Funding: As for source of funding of the 302 projects from which data were collected, 76.2% were financed by Title I; another 22% were funded or partially funded by federal sources; only 2% were locally funded (6 projects). (See Appendix IX, page 362, for complete breakdown.)

The number of children served by the six locally funded programs was 2,260; on a projected basis, one might expect the number of children being served by programs entirely supported by local resources to be between three and five thousand. Half of these programs had pre-service training; two of the six had in-service training; half were summer and half were winter; five of them had no evaluator; half of them concerned reading. It appears that these projects were formerly Title I programs continued on local funds.

11. Time of Project: Forty-three percent of the 302 projects were held during the school year; 43.7% in the summer; 12.9% during both.

12. Number of Grades Included in Project: About a quarter of the projects served 6 grades simulataneously; another quarter served 3 or 4 grades; about a quarter served 7 to 11 grades. (See complete tabulation, Appendix IX, page 363.) Twenty-five percent of the projects included kindergarten or pre-school; 44% included the first grade. Thus, the major thrust is with the younger students.

13. Number of Disadvantaged Children Being Served: Estimates from projects on disadvantaged children not being served differed considerably from estimates from school districts covering the same area. According to project estimates, 45% of the children in need of compensatory education are not getting it. (This percentage is likely to be inaccurate. It is based on estimates where the same child may be counted more than once, since several projects within a given district were making estimates on the number of children needing services and not getting them. Project estimates for total number of children not being served but needing it was 72,041; number of disadvantaged children being served was 88,102. Both of these numbers undoubtedly include many cases of counting the same child more than once.) The difference also probably reflects the difference in the way district personnel view the extent of the need as compared to the way project personnel view it. At some point, there should be an effort made on the part of the State to take an accurate

census of disadvantaged youngsters so we have a clearer picture of the magnitude of the job to be done.

14. Number of Staff Members: Three hundred and one projects reported 3,074 full-time and 1,631 part-time staff members. This represents an average 1:15 student-teacher ratio.

15. Pre-service and In-service Training: Over 38% of the projects (302) held pre-service training sessions of one week or more while 61.6% had in-service training related directly to the project on a regular basis.

16. Evaluation: Over 45% of the 302 projects reporting assigned a person to the project specifically for evaluation purposes. Around 11% of the projects assigned a staff member to evaluation work for 50% or more of his time. (See Appendix IX, page 364, for more detailed tabulation.) Approximately 37% of the projects reporting (302) had evaluators who participated in planning. Characteristics of project evaluations are tabulated in Appendix IX, page 364.

With some minor exceptions, these survey data are consistent with observations made in the sample.

CROSS TABULATIONS

Over 60 cross tabulations were run to determine the degree of certain relationships among project characteristics. Several of the more significant ones are summarized below:

17. Testing Characteristics By Project Type: Projects described as reading, language arts, or general academic had a considerably higher than average use (72.2%) of pre-post testing (92.7%; 85.3%; and 84.1% respectively), while guidance and psychological services, vocational, and "other" types of projects had a considerably lower than average use of pre-post testing (40%; 40%; and 33% respectively). These differences were significant at the .01 level using a chi-square test.

Reading projects reported greater than average (61.9%) use of standardized test programs (81.8%) while non-academic enrichment, vocational, and "other" projects reported significantly less use than average of standardized test programs (25%; 26.7%; and 26.7% respectively). Differences calculated by chi-square test were significant at .01 level.

Projects described as in-service training, non-academic enrichment, general remedial, and vocational had a significantly higher than average (41.7%) use of opinionnaires (100%; 75%; 62.5%; 60%). Projects described as special classes and reading had a lower than average use of opinionnaires (21.4%; 29.1%). These differences were significant at the .05 level.

These results serve to emphasize the need for good evaluative instruments for the areas mentioned.

18. Staff Training By Project Type and Time of Project: Non-academic enrichment and school readiness were considerably higher than average (61.6%) in reporting in-service training on a regular basis directly to the project (75%; 72.4%). Vocational and "other" projects were lowest in in-service training (40%; 46.7%). These differences are significant at .05 level.

School readiness and non-academic enrichment projects had above average (38.7%) rates of pre-service training (55.2% and 50% respectively). General remedial and guidance and psychological services had considerably below the average rates (25% and 26.7%). These differences were significant at the .05 level. Proportionately more pre-service training was held in projects which ran during both summer and school year and summer only than in winter projects only (46.2%; 40%; 34.6%). Differences were significant at .01 level. Proportionately more in-service training was offered by projects which ran in the winter than in the summer (69.2% for winter as opposed to 58.3% for summer; average was 61.6%). Differences were significant at the .01 level. There seems to be more time available for pre-service in the summer while in-service training seems to make more sense during projects of more extended duration.

19. Evaluator By Project Type: Non-academic enrichment, school readiness and academic instruction projects reported a significantly greater than average (45.7%) use of an evaluator assigned to the project specifically for evaluation (75%; 65.5%; 59.1%). Guidance and psychological services were significantly less likely than average to have an evaluator assigned (26.7%).

20. Time of Project By Type: Guidance and psychological services, special classes, and instructional services type projects were significantly above the average (43%) in reporting school year programs (80%; 78.6%; 77.1%). General remedial and non-academic projects tended to be above the average (43.7%) in occurring in the summer (80%; 75%). These differences were significant at the .01 level.

APPENDICES (I through VII)

APPENDIX I

Practical Activities Associated with the Project

Since our purpose in carrying out an evaluation of compensatory education programs in Massachusetts was to help find ways of improving evaluation so that modification for improvement might be introduced, the project study staff engaged in a number of activities not directly related to the study but which were designed to help facilitate modification.

Among the most important of these were two conferences, one held in March and the other in July. During these conferences, attended by members of the Advisory Council and representatives from projects in our sample, critical issues in compensatory education with particular reference to problems in evaluation were discussed.

The first conference was intended to give a general overview of the study and to present federal, state, and university personnel to discuss Title I evaluation and interact with persons from local projects.

> Dr. Daniel Jordan, Project Director, presented an overview of the study;
>
> Miss Janice Meissner, consultant to the State Department of Education spoke on the State Evaluation of Title I;

Mr. Robert Jeffery, Project Director of Title I for the State spoke on the implications of the State Report on Title I;

Dr. Marvin Cline led a workshop on "Short-term Evaluations";

Dr. Daniel Jordan made a presentation on "Critical Variables in Compensatory Education";

Dr. James Fortune held a session on "Decisions Confronting the Evaluator"; and,

Dr. Charles Hammer, Title I Office in Washington, held an informal question and answer period on evaluation problems.

The second conference was a two-day workshop, the program for which was as follows:

"Writing Behavioral Objectives"--Mr. Ray Johnson

"Model Programs--Development and Evaluation Design"--Dr. Marvin Cline and Dr. James Fortune

"Information Dissemination"--Dr. Richard Hackney

"PERT Charting"--Mr. George Worle

"Self-Image in Compensatory Education"--Dr. Daniel Jordan

"Helping the Disadvantaged Child"--Dr. William Kvaraceus

"Testing--What It Can and Cannot Do"--Dr. David Berliner

"Testing Workshop on Reading"--Dr. David Yarington

"Testing Workshop on Intelligence"--Dr. Marvin Cline

"Testing Workshop on Attitudes"--Dr. David Berliner

Information on these conferences and other items pertinent to compensatory education were disseminated to all Title I programs in the State by means of a newsletter. Other publications include articles on the project and compensatory education in the Spring, 1969, issue of Trend magazine[1].

A comprehensive review of the literature on compensatory education, undertaken as a prelude to the formation of the questionnaire and observation protocol, was summarized by the Project Director in an article on Teaching the Disadvantaged which will appear as a chapter in the new Handbook for Teachers, soon to be published by Scott-Foresman.

Brief reports containing observations and recommendations made by site visitors were written up and distributed to the superintendents under whose jurisdiction Title I projects in our sample fell.

The fact that the study was being undertaken by staff and students in the School of Education helped to create interest sufficient to initiate the establishment of a program in compensatory education which will eventually provide pre-service and in-service training for those who want to prepare for teaching, research and evaluation, and curriculum development in compensatory education.

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[1] Jordan, Daniel C., "People with Answers Needed to Educate the Disadvantaged," Trend, Spring, 1969, vol. V, no. 3, page 52.

Spiess, Kathryn Hecht, "Improving Compensatory Education in Massachusetts," Trend, Spring, 1969, vol. V, no. 3, page 41.

Considerable consultation has been held with the State Department Title I Office for the purpose of exploring ways and means of improving compensatory education services throughout the State. As a result of some of these consultations, the Massachusetts Advisory Council on Education has identified and published a list of university personnel who are willing and able to serve as consultants to Title I projects on their evaluation. On the 22nd of October, 1969, the Massachusetts Advisory Council on Education, in collaboration with the Title I Office in the State Department, hosted a conference for these consultants. At this conference, staff members of our study presented preliminary findings.

The Title I Office in the State Department also held a series of regional conferences discussing problems and new guidelines for Title I proposals for the coming year. Members of our staff were also invited to present preliminary findings on our study at these conferences.

As a result of our conference activity and visits to projects in the sample, principals, superintendents, and other staff members of projects in our sample have visited the campus for the purpose of consulting on specific problems and exploring ways and means of collaborating with the University for the purpose of improving compensatory services.

Finally, the School of Education has submitted to different funding agencies a number of proposals for setting up the kind of research and training program in compensatory education that would represent an implementation of many of the recommendations of this document.

APPENDIX II

Projects in the Sample

Athol Public Schools
"Camp Scholar"

Barnstable Public Schools
"Remedial Reading"

Bedford Public Schools
"Operation Bootstrap"

Boston Public Schools
"Compensatory Services"

Boxford Public Schools
"Teacher Coaches for Poor Achievers"

Bridgewater-Raynham Regional
School District
"Words and Color: Remedial Reading"

Brookline Public Schools
"Extension and Enrichment of
Curriculum"

Buckland-Shelburne Regional School
District, "Catch-up II"

Cohasset Public Schools
"Special Counselor"

Fairhaven Public Schools
"After School Tutorial"

Gloucester Public Schools
"Camp Plum Cove"

Hanover Public Schools
"Improving Reading Level"

Holyoke Public Schools
"English to Puerto Ricans"
"Summer Head Start"

Hopedale Public Schools
"Remedial Reading and Special
Therapy"

King Philip Regional School
District, "Remedial Reading"

Lenox Public Schools
"Summer Remedial Reading"

Ludlow Public Schools
"Stimulation"

Masconomet Regional School
District, "Aide to Slow Learners"

Medfield Public Schools
"Project Respond"

Mendon-Upton Regional School
District, "Growth Through Reading"

Milford Public Schools
"Development of Reading and Math"

Millville Public Schools
"R.S.P."

New Bedford Public Schools
"Compensatory Services"

Newburyport Public Schools
"Broad Horizons"

Oxford Public Schools
"Taped Teaching"

Palmer Public Schools
"Improving Language Skills"

Plainville Public Schools
"Opportunity Class"

Plymouth Public Schools
"Operation Keep Pace"

Quincy Public Schools
"Comprehensive Program"

Reading Public Schools
"Improving Reading"

Southern Berkshire Regional School
District, "Summer Work Study"

Superintendency Union #43 - North
Berkshire, "Project Boost"

Superintendency Union #61 -
Sturbridge, "Summer Cultural
Program"

Sutton Public Schools
"Summer Tutorial Type Instruction"

Swansea Public Schools
"Pre-kindergarten Program"

Taunton Public Schools
"Title I Summer Program"

Waltham Public Schools
"Operation Mainspring"

Westfield Public Schools
"Improving Reading Skills"

Williamstown Public Schools
"Teacher Aide Program"

Wilmington Public Schools
"Saturday Reading Program"

Woburn Public Schools
"Ungraded Class for Non-English"

Wrentham Public Schools
"Aid to Underachievers"

APPENDIX III

Questionnaire and Observation Protocol Used for the Evaluation of Projects in the Sample in Narrative Form with Commentary

The protocol used was designed to meet the needs and purposes of the study while at the same time reflecting a reasonably comprehensive view of the research literature on compensatory education. It is organized in two parts: Part I contains questions and points for observation which relate to a given project's own planning and evaluation procedures; Part II contains questions and observations which are pertinent to variables which research has demonstrated to be critical to the success of compensatory education programs. Each part contains several sub-sections of related questions to be asked and important observations to be made.

PART I: QUESTIONS AND OBSERVATIONS CONCERNING PLANNING AND EVALUATION

A. PLANNING PROCEDURES

1. Who was involved in the planning process?

Since evaluation is based on a determination of how well efforts are achieving objectives, judgments about the quality of a project's evaluation activities will depend, at least in part, on what objectives were adopted and how they were formulated as part of the planning process. Thus, information was gathered on all aspects of project planning.

We were interested in finding out how extensive were the personnel resources used in planning; where the executive power in making planning decisions was located; to what extent universities and colleges were involved in planning; whether or not Title I students and Title I parents had a say in the planning of projects which will affect them; and, to what extent the school assumed leadership in cooperative planning with other agencies which might be pertinent to the achievement of project objectives, such as Community Action Program agencies, welfare agencies, Public Health Service agencies, etc.

2. How were the student needs on which the project was based determined?

   Of particular concern here was information on the actual needs, how they were identified, and whether or not and how priorities among the needs were determined.

3. How much time was there for planning?

   Exploration of this question included gathering data on the amount of time between the planning and the start of the project. The time factor has obvious implications for program quality.

4. Is this year's program a repeat of last year's program?

   This question was extended into a consideration of the rationale for repeating or not repeating a project, ascertaining what kinds of revisions had been made and on what basis, and whether or not the previous fiscal year's project evaluation was used in making a decision about whether or not to repeat the project or to make revisions.

5. What plans were made for in-service training?

In some cases in-service training is regarded as a project activity which therefore needs some careful planning. We were interested in finding out how the in-service training as a project activity was planned, who was involved in the planning, and how the in-service training related to project objectives. (See section B for information on project objectives.)

6. Did the project planners determine the evaluation procedures?

   Since the evaluation aspects of many projects are added after the planning has been carried out, and in some cases even after the program has been implemented, we were interested in the vital question of the relationship between planning and evaluation and to determine the degree to which evaluation was present in the minds of those who actually planned the project.

7. Were there any theoretical foundations to the planning?

   Since so many programs come into being with no regard to research findings or useful theory, we were interested in ascertaining the extent to which Title I program planners adopted any predetermined and conscious theoretical basis for making planning decisions. For instance, special attention was given to whether or not the planners decided to have a structured or unstructured program based on some theoretical orientation to this question.

B. FORMULATION OF PROJECT OBJECTIVES

8. Have project objectives been defined in behavioral terms?

   Since one of the perennial difficulties in evaluating programs is related to the fact that objectives are not stated in any measurable form, we were interested in finding out to what extent project planners were able to form their objectives in precise enough terms to permit adequate evaluation. We were also interested in ascertaining whether or not success criteria were established for individual students and for the project as a whole and whether or not degrees of accomplishment or outcomes were specified for each of the objectives (so that project administrators might know the extent to which they were approximating their goals).

9. What relationship did project objectives have to assessed needs?

   Obviously, if a program is going to fulfill actual needs, project objectives should be based upon a careful assessment of needs. We were interested in determining how well organized the planning procedure was and the extent to which objectives were relevant because they bore a direct relationship to assessed needs. We were also interested to note whether or not project planners formulated objectives based on a consideration of the fact that most Title I pupils are behind when they enter the project and that they have to achieve at a rate above the norm if they are to catch up. Related to this point is the question of time allocation for project activity. We were interested to see how the amount of time allocated for project activity was determined and how much actual time was devoted to it.

10. Was there agreement and understanding on project objectives among staff members?

    One of the common causes of organizational ineffectiveness is the fact that many people in the organization have no conscious notion of the objectives of the organization of which they are a part. Observers were interviewed to find out the extent to which project staff understood the project's objectives and agreed with them and the degree to which staff members maintained a common implementational commitment to the priority of objectives.

C. SELECTION OF PROJECT PARTICIPANTS

11. What criteria were used to select students for Title I projects?

Title I legislation is geared for a particular target population, namely those who are disadvantaged. The purpose of this question was to determine to what extent and in what ways projects identified members of the target population and to see to what extent different projects reflect similar or dissimilar notions of the kinds of students who should be in Title I programs. Obviously, project objectives and plans should be geared to meet the needs of this population.

12. What were the diagnostic measures taken, if any?

Diagnostic measures are important in assessing needs and therefore useful in determining program objectives and content.

D. PROJECT EVALUATION

13. What kind of evaluation design was used?

Where possible, observers used the "X and O" format of Campbell and Stanley as reported in Gage's Handbook of Research in Teaching[1] for describing the basic structure of evaluation designs used by the projects. We were interested to note the range of designs, if any, and their levels of sophistication, since the more sophisticated and appropriate the design, the better feedback for program improvement. Observations were made to determine whether or not the design included comparison as well as treatment groups and, if so, how the comparison group was selected; whether or not treatments or conditions were applied or held constant throughout the project; whether or not there had been a differential loss of respondents from the comparison groups; and, whether or not the comparison group was in a parallel program.

---

[1] Campbell, Donald T., and Stanley, Julian C., "Experimental and Quasi-experimental Designs for Research on Teaching," in Gage, N.L. (Ed.) Handbook of Research on Teaching, Rand McNally & Co., Chicago, 1963.

A modified form of the Campbell and Stanley code for describing the evaluation designs was used, in which X = exposure of a group to an experimental variable or event (treatment) and O = process of observation or measurement. The graphic presentation of the design can be used to analyze experimental strengths and weaknesses of the evaluation in respect to project concerns.

One aspect of some projects' organization made them more difficult to evaluate than others, namely, the involvement of a cooperative arrangement with several institutions, particularly those that were non-public. Inquiry was made to glean information on how the evaluation was carried out in these kinds of projects and who did it.

If the evaluation design adopted a specific measurement procedure utilizing pre- and post-tests, information was collected to determine whether or not project personnel considered the importance of making certain that nothing other than the experimental variables occurred between the first and second measurements unless accounted for in some way.

Inquiry was also made to ascertain whether or not project directors or evaluators made any systematic attempt to describe and measure any of the characteristics of the physical and social environment which were thought to be relevant to the outcomes of the project. For instance, the grading philosophy or grading system of a project may have as much or more effect on performance as other pedagogical concerns, such as relevance of curriculum materials, etc.

It frequently happens that a project evaluation focuses only on one or two aspects of the program. Thus, note was taken if there were any project activities which were thought to be meaningful that were not included in the evaluation.

Since some program effects may not be felt for a year or more, note was made of all longitudinal investigations of Title I efforts and all programs which included efforts to follow each student over more than a period of a year.

Finally, it was determined whether or not the project planners or evaluators had devised and were using a schedule, such as PERT charting, for the evaluation process itself.

14. What means were used to measure student performance?

All standardized tests used in measuring student performance were tabulated; locally made tests were collected or described; and, other sources and methods of collecting information such as questionnaires, logs, attendance records, anecdotal records, and unobtrusive measures were described and their source noted, i.e., staff members, community agencies, parents, or students. We also inquired as to whether or not tests were given regularly within the school or whether or not there was special testing in the Title I project itself. Of particular concern here was finding out whether or not there were any types of baseline data available that were different from pre-tests and in what way these data were used. Information was also gathered on: the relationship of data collected to project objectives; whether or not consideration was given to the reliability and validity of the tests used; whether or not evaluators were sensitive to the fact that changes in observers, scorers, or calibration of measuring instruments can influence changes in the obtained measurements; and, grading philosophies.

15. How were project data analyzed?

Information was obtained on how the data were analyzed and by whom; what statistical procedures were used in the treatment of the data; whether or not evaluators took into consideration that measurements of groups selected on the basis of their extreme scores may reflect in their post-tests a statistical regression toward the mean; whether or not evaluators took into consideration the fact that normal maturation will produce within each student a degree of progress related to nothing else other than the function of the passage of time.

16. Was there any attempt to relate the project's results with the needs assessed?

If project results are not filling assessed needs, then it is clear that modifications must be introduced into the program.

E. PROGRAM MODIFICATION

17. What is the form of the evaluation report and does it discuss implications for modification?

The form of the report is often a powerful determinant as to how it will be used. We were interested to note: whether or not evaluation reports were turned in merely as a fulfillment of a requirement of the State Department or whether or not the report took on different forms which might make it maximally useful to project staff members in modifying certain aspects of the program; and, whether or not it contained a discussion of implications or recommendations for modification.

18. What were the characteristics of the dissemination of evaluation results?

Since the decision to modify a program ought to be based on evaluation, we were interested to find out how evaluation results were disseminated: who got the report; when the results were communicated; whether or not there was a formal mechanism in operation so that upon the analysis of feedback, the project could be quickly modified (i.e., through weekly meetings to discuss project progress); whether or not the evaluation was used in replanning a project; whether or not information on the progress of individual children who were removed from the regular classroom was reported to their regular classroom teacher in any systematic way; and, whether or not techniques, materials, and teaching approaches used in Title I projects had been communicated to the regular school program and whether or not they had been incorporated into the regular school program.

19. What were the opinions of project directors and staff members concerning the success and/or values of the project?

We were interested to find out the opinions of project directors and staff members on the effectiveness of the projects and to determine the extent to which there was inter-staff agreement. Staff members were asked what changes they would make if they were to start the program from the beginning again and whether or not any of the changes they would like to make had been incorporated or were going to be incorporated when the program is replanned. They were asked to indicate some of the chief negative outcomes of the project which were not anticipated, whether or not these were reported in the evaluation report and what were some of the unanticipated positive outcomes of the project and whether or not these were incorporated into the report.

20. Was the evaluation process itself evaluated?

Obviously a poor evaluation procedure or design will not yield the kind of results which will enable a project director to modify his program with the aim of improving it in any sensible and systematic way. It is therefore necessary to evaluate the evaluation procedures in a given project so that evaluation itself might be improved. Inquiry was made as to whether or not project directors considered the evaluation procedures to have been successful or unsuccessful based on their experience.

21. Was any attempt made to carry out a cost accounting analysis of the project?

An evaluation is not complete if it does not include information that will enable a judgment to be made as to whether or not the cost of the project is reasonable in light of what it accomplished.

PART II: QUESTIONS AND OBSERVATIONS ON VARIABLES IMPORTANT TO COMPENSATORY EDUCATION

Since evaluation refers to the process of determining how well project objectives are being achieved, it is possible for a project to appear highly successful, even though the objectives being achieved are inappropriate or irrelevant to the main purpose of compensatory education. It is therefore essential to consider the appropriateness of objectives and the degree to which these objectives reflect an awareness of research findings relevant to compensatory education. Thus, the observations and questions of this part were designed to glean information from projects pertinent to variables which research has demonstrated to be critical to the success of compensatory education programs.

F. STAFF CHARACTERISTICS, SELECTION, RECRUITMENT

1. Characteristics of project teachers and administrators.

   Information was collected on amount and kind of prior experience of staff members, particularly in relationship to the present assignment of the Title I staff, length of time with the system, whether or not staff members volunteered or were assigned to their positions, and the amount of time that was allocated for assignments. Of particular concern here was whether or not the responsibility of the direction of the project was an added duty to an already full load or a partial or new full-time position.

2. Supporting staff.

   If the project employed support staff, such as teacher aides and/or other para-professionals, information on their backgrounds, duties, training, and the way in which they were utilized was gathered.

3. Staff characteristics related to ability to establish rapport with students.

   Research in this area has indicated the importance of the capacity of a teacher to establish rapport with disadvantaged youngsters if they are to learn with any degree of efficiency. We therefore gathered information on the teacher's attitude toward the disadvantaged child's learning ability, the Title I project, the school in general, his/her own assessment of capacity in the project, and on the characteristics of the expections of teachers with regard to pupil performance.

In addition, we were interested to see to what extent Title I projects serving different racial or ethnic groups made efforts to provide teachers, aides, or administrators of the project from the same ethnic group as the majority of the children and whether or not Title I staff members lived in areas similar to those of the students whom they were teaching.

4. Attitude of non-Title I personnel toward the project.

   In some Title I programs, a cleavage between non-Title I personnel and Title I staff puts the Title I child into a position where he bears the brunt of staff disunity. We were therefore interested in finding out the prevailing attitudes of non-Title I personnel towards the project.

G. PRE-SERVICE AND IN-SERVICE TRAINING

5. Description of training of Title I staff.

   Both pre-service and in-service training of Title I personnel were considered. Specific note was taken as to whether or not teachers had had training which included role playing, microteaching, strength training, and utilization of games in teaching. Information was also gathered on how long the pre-service and in-service training was and who was in charge of it.

H. LEARNING HOW TO LEARN--DEVELOPING EFFECTIVE LEARNERS

6. Teaching the process of learning.

The essential feature of a good compensatory education program is adequate provision for means that will enable disadvantaged youngsters to become permanently effective learners. This involves learning something about how to learn itself. We were therefore interested in ascertaining whether or not compensatory education programs actually taught or offered experiences which would increase the competence of the learner by enabling him to understand something about the nature of knowledge and recall, techniques for comprehension and transferability of knowledge, how to apply principles, how to analyze and synthesize material, how to perform evaluations of materials, and convergent and divergent thinking.

7. General skills and capacities related to learning.

Attempts were made to identify any part of a given project which focused on the development of any of the following capacities: listening, observing, recording information, attending behavior and increasing attention span, test taking, following directions, effective work and study habits, visual discrimination, vocabulary and word reasoning, speech, information seeking behavior (how to ask questions and where to find information), problem solving, and participation in a group as a member. All of the above capacities are known to contribute to efficiency in learning and therefore should be a part of every well-developed compensatory education program.

I. MOTIVATIONAL ASPECTS OF THE PROGRAM

8. Individualized prescriptions for learning.

In order to avoid setting children up for failure it is essential to know where they are and to make individualized prescriptions for learning consistent with their present status. We were therefore interested in having information on whether or not such individualized prescriptions for learning were made, how they were made, whether or not there was an emphasis on the strengths or weaknesses of the pupils and whether or not consideration was given to the interests of students.

9. Basis for curriculum preparation.

Motivation has been found to be in part dependent upon the relevance of curriculum materials from which students must learn. We were therefore interested to know whether or not and to what extent the curriculum for the program was planned to be consistent with students' environments, experiences, abilities, and interests. We also looked for evidence of specific favorable verbal and non-verbal reference to racial and cultural minority groups within the materials and teaching techniques employed.

10. Presentation mode.

Since research evidence indicates that the following presentation modes facilitate learning, we inquired as to whether or not projects made provision for them:

> Organization of material in short, sequential steps as needed;
>
> Continuous and immediate success experiences with immediate feedback being viewed as an important reinforcer;
>
> Adequate evaluation of where the child is at any given point and his readiness for the next step;
>
> Use of the "saturation approach" (repetition,

summarization, alternative explanations, and use of connecting links with different contexts); and,

Multi-media presentation.

11. Handling of frustration and failure.

Many disadvantaged youngsters have a background of failure which figures strongly in present frustrations with learning. The distribution of rewards and punishments can have a direct effect on reducing or increasing frustration and failure. Inquiry was made as to whether or not projects had adopted a consistent policy concerning reward and punishment, whether or not the project capitalized on student interests as a means of fostering motivation, and whether or not activities were arranged so that children could experience a sense of mastery and achievement (competency motivation) and consolidate gains made in this direction by having the opportunity to use what was learned.

12. Self-image.

During the last several years, self-image has emerged as a useful conceptualization of how a person regards himself and how that self-regard in turn determines behavior. Since so many recent efforts in compensatory education have dealt with "improvement of self-image" as an objective of compensatory education, we gathered information on the extent to which projects made any attempt to analyze the self-concepts of children and whether or not there were specific aspects of the project which were planned as appropriate means for developing healthier self-concepts (such as systematic use of role models or systematic use of a variety of reinforcements following achievement on any level).

13. Levels of involvement.

    It has been found that learning on the part of the disadvantaged can be greatly facilitated if they do not have to remain passive recipients of information but in fact can become involved in doing things. For this reason, we were interested to ascertain whether or not projects employed means of involving youngsters and making them more active participants in the learning process through games, dramatics, role playing, and use of peers as teachers.

14. Special instructional materials.

    The individualization of instruction can be facilitated by the use of a wide variety of different instructional materials and equipment. Information was gathered as to the kind of special instructional materials and equipment that was available, whether it was utilized or not, what was being locally developed, and whether or not project personnel had access to facilities for creating overheads, film strips, still photos and slides, moving films, tape recordings, and video-tapes.

15. Class size and characteristics.

A smaller class size can facilitate the individualization of instruction. Therefore, we collected data on class size and pupil/teacher ratio. We were also interested to see whether or not classes were ethnically integrated since studies have shown that integration facilitates learning on the part of minority groups but does not depress learning of the majority.

J. PARENTAL, HOME, AND COMMUNITY INVOLVEMENT

16. Parental support.

Studies have shown that significant individuals in the lives of students have an important bearing upon learning in school. We were therefore interested in whether or not projects recognize the nature of this influence and whether or not they had a program designed to involve parents and, if so, the nature of this program.

17. Community support.

Since the progress of a child in school is in many cases also directly related to his connections with other parts of the community in which he lives, we were interested to find out the nature and extent of community involvement in compensatory education programs. We inquired specifically as to whether or not any given program had a referral service whereby teachers and/or other project staff, recognizing certain problems or deficiencies among students, could call upon other agencies for assistance (such as welfare agencies, charitable institutions who could provide clothing, clinics to provide medical attention, dental care, glasses, etc.). In this connection we were also interested to find out whether or not any program made provision for maintaining adequate nutritional status of students.

APPENDIX IV

General Survey Forms

GREEN FORM (General information--to be answered only once.)

1. Estimate unduplicated count of children being served by all projects submitted on yellow sheets __________.

2. Estimate the total number of school age educationally disadvantaged children and youth in your school district _____________.
   Total number of school age children in district _____________.
   (See definition of educationally disadvantaged in the covering letter.)

3. Did you have any assistance from a college or university? Check the following items which may be appropriate:

   ___diagnosing needs
   ___selecting population to be served
   ___program planning
   ___evaluation
   ___other--specify ____
   ___curriculum development
   ___in-service training of staff
   ___pre-service training of staff
   ___budget determination

4. In your opinion, what are the two greatest weaknesses of your projects?

5. In your opinion, what are the two greatest strengths?

(Please see page 240 regarding use of general survey forms.)

6. By projects, what is the most important assistance not now available which you would like to have from the State Department of Education (excluding heavier funding)?

Project Title	Assistance

7. In your opinion, what is the most important assistance not now available that can be given to your program from universities and colleges?

Send to:

Dan Jordan
School of Education
University of Massachusetts
Amherst, Mass. 01002
No. of yellow forms accompanying this response ______.

______________________ Name
____________________ Position
______________________ Date
________________ School System
___________________ Phone No.

YELLOW FORM (Project Information--to be answered for each project on a separate yellow sheet.)

What project(s) in compensatory education are in operation (9/68 through 8/69) in your school system?

1. Official Title ______________________________.

2. A brief description.

3. Specific sources of funding. (Specify, e.g., ESEA I, III, VI, VII, VIII, Follow Through, Voc. Ed. Act, other federal sources, state sources, local sources, foundations.) ____________________.

4. School year/summer.

5. Grade level of children served _____.

6. Number of children being served _____.

7. Estimate how many children needing this service are not being served _____.

8. How many persons are on the project staff? full-time___ part-time___
   a. Does the staff have a minimum of one week pre-service training specifically for this project? Yes No
   b. Does the staff have any in-service training on a regular basis, directly related to the project? Yes No

9. Has a person been assigned to the project staff specifically for evaluation purposes? Yes No

a. If yes, how much of his/her time is devoted to this task? ____%

b. Did this person participate in the planning of this project?

Yes No

10. Check all of the following which describe your evaluation.

___ Pre-test, post-test
___ Use of control groups
___ Operations data
(budget, facilities, time, etc.)
___ Opinionaire
___ Other ___________________________

___ Teacher observations
___ Standardized test program
___ Descriptive report to
sponsoring agency
___ No evaluation

11. How do you use this evaluation information. When is it used?

______________________________ School System

APPENDIX V

Code Sheet for Methods and Sources

The code for a particular source and method of obtaining information can be found by taking the number of the source and the letter of the method of obtaining information. (See examples following code.)

SOURCE

1. Superintendent
2. Principal
3. Project Director
4. Evaluator
5. Title I teacher
6. Non-Title I teacher
7. Title I student
8. Non-Title I student
9. Parent of Title I child
10. Parent of Non-Title I child
11. Clerk
12. Janitor
13. Community Person
14. Teacher Aide
15. Volunteers
16. Reading Specialist
17. Specialist (specify)
18. Other (specify)

19. Applications
20. Evaluation Reports
21. Written material (specify)
22. Other (specify)
23. Title I Classroom
24. Non-Title I Classroom
25. Title I activity (specify)
26. Non-Title I activity (specify)
27. Committees & Organizational meeting (specify)
28. Other (specify)

x Assistant Administrative Personnel*

METHODS

A. Observation
B. Direct questioning
C. Indirect questioning
D. Conversation and discussion
E. Reading
F. Personal Opinion
G. Other (specify)

Numbers 1-18 refer to human sources
Numbers 19-22 refer to collected materials
Numbers 23-28 refer to groups and places

* A sub$_x$ signifies an assistant (e.g., assistant principal, assistant superintendent, etc.).

Code and Method Examples

1C	Indirect Questioning (C) of the Superintendent (1)
19E	Reading (E) a Project Application (19)
3_xB	Direct Questioning (B) of an Assistant Project Director (3_x)
7AD	Observation (A) and Conversation and Discussion (D) with a Title I student (7)

APPENDIX VI

Data Summaries

DATA SUMMARY

Needs as ranked by projects in the sample (N = 43).

Need	Summer 1st	Summer 2nd	Summer 3rd	Summer Total	Winter 1st	Winter 2nd	Winter 3rd	Winter Total	Grand Total
1. Reading improvement	7	3	0	10	4	1	1	6	16
2. Improve self-image	4	4	4	12	1	1	1	3	15
3. Improve attitude toward school	2	3	1	6	0	0	1	1	7
4. Cultural enrichment	0	1	4	5	0	0	1	1	6
5. Language (verbalization)	0	2	1	3	0	1	1	2	5
6. Academic skills	0	1	1	2	0	1	0	1	3
7. Improve performance on standardized test	1	0	1	2	1	0	0	1	3
8. Remediation of specific learning handicaps (perceptual handicap)	0	0	0	0	1	1	0	2	2
9. Knowledge of English	0	0	0	0	2	0	0	2	2
10. Math skills improvement	2	0	0	2	0	0	0	0	2
11. Social adjustment	0	0	1	1	0	0	0	0	1
12. Improve racial balance	0	0	0	0	1	0	0	1	1
13. Assist mentally retarded	0	0	0	0	1	0	0	1	1

Other kinds of needs not related directly to individual students were mentioned, though infrequently, such as decrease drop-out rate, decrease grade failure rate, need for challenging curriculum, pre-school programs, etc. (For discussion, please see page 137.)

DATA SUMMARY

Amount of time between planning and start of program (N = 34).

Amount of time	Summer projects	Winter projects	Total
1 - 2 weeks	3	0	3
3 weeks to 1 month	5	3	8
2 months	4	3	7
3 - 4 months	2	0	2
More than 4 months	2	2	4
Planning is always going on	0	1	1
No formal planning during school year	3	0	3
Miscellaneous responses such as "sufficient," "varies each year," etc.	1	5	6

For discussion, please see page 141.

DATA SUMMARY

Kinds of revisions made in current project compared to previous year (N = 33).

Revision	Summer projects	Winter projects	Total
No revisions made	3	6	9
Made program more diversified	5	1	6
Personnel changes	4	1	5
Use of different curriculum and equipment	3	0	3
More grades served	0	2	2
Fewer subjects being included	0	2	2
Add teacher aides	2	0	2
Introduced new and/or different testing program	2	0	2
Serving fewer children	1	0	1

Other changes mentioned include: more home visits; Title I board to coordinate all projects; different selection process; more parent involvement; and, change in evaluation procedures. (For discussion, please see page 142.)

DATA SUMMARY

Theoretical bases for programs (projects from which data were available = 37 out of 43).

Theoretical approach	Summer projects	Winter projects	Total
No theoretical basis used	14	10	24
Locally developed theories about drop-outs	3	0	3
Self-concept modification	2	0	2
Counseling theory	0	1	1
Gillingham method of tutoring children with specific disabilities	0	1	1
Pre-school theory (Deutsch, Ausubel, Templin)	0	1	1
Special education	0	1	1
Theory based on characteristics of the disadvantaged	1	0	1
Curriculum development theory	1	0	1
Headstart philosophy	1	0	1
Adult-child interaction	1	0	1

(For discussion, please see page 147.)

DATA SUMMARY

Program objectives (N = 43).

Program objectives specified	Number of summer projects	Number of winter projects	Percentage of all projects
Improve reading	14	7	49%
Improve self-image	12	6	42%
Improve verbal skills	12	5	40%
Raise general achievement levels	5	4	21%
Improve attitude toward school	5	4	21%
Improve performance in skill areas (unspecified)	4	4	19%
Increase expectation for success in school	2	5	16%
Improve attention span	1	6	16%
Improve math skills	0	6	14%
Develop non-verbal skills	3	2	12%
Provide individualized instruction	3	1	9%
Improve physical health	0	3	7%

NOTE: Projects may have more than one objective and most of them do; therefore, percentage column does not total 100%.

(For discussion, please see page 159.)

DATA SUMMARY

Selection of participants--qualifications used by projects (necessary or having priority, but not sufficient). (Data come from 18 projects which used qualifications as listed.) See page 150 for discussion.

Qualification	Number of summer projects	Number of winter projects
Low economic status (deprived, disadvantaged)	5 2 (priority)	2
Younger or earlier grade	1	0 1 (priority)
Not a discipline problem, emotionally stable	0	1
Parents receptive to program	0	1
Student is a previous participant in this or some other program	0 1 (priority)	0
Attends target school	3 1 (priority)	0
Feels "out of it," a potential drop-out	1	0
IQ in specified range	2	1
Over 110	0	1
90 - 110	1	0
80+	1	0
Not high	1	0
Achievement test scores not high	1	0
Of right age or sex to balance these factors in the program	0 1 (priority)	0
Will benefit from more individual attention	0	1
Family large or one-parent	0 1 (priority)	0
A small number of normal achievers selected	0 1 (priority)	0

DATA SUMMARY

Selection of participants--criteria (necessary and sufficient). (Data are from 32 projects which specified such criteria.)

Criteria	Number of summer projects	Number of winter projects
POOR CLASSROOM PERFORMANCE	5	5
In reading specifically	1	1
In another specific area	0	1
SPECIFIC NEED FOR SERVICE OFFERED SHOWN BY DIAGNOSIS	1 (1 part)	7
In reading	0	3
Specific learning disability	0	1
Health problem or physical handicap	0	0 (1 part)
Emotional or behavioral	1 (1 part)	0
I.Q. IN SOME SPECIFIED RANGE	2	0 (1 part)
Low, but not retarded	2	0
Retarded	0	0 (1 part)
LOW SCORE ON ACHIEVEMENT TEST	8	6 (1 part)
Reading	2	2
Underachiever (achievement below I.Q.)	1	2 (1 part)
NON-ENGLISH SPEAKING	0 (3 part)	1
OPEN TO ALL	2	0

For discussion, please see page 163.

DATA SUMMARY

Selection of participants--methods of identification used by projects. (Projects from which data were available = 29 out of 43.)

Identification method	Number of summer projects	Number of winter projects
RECOMMENDATION OR REFERRAL BY SCHOOL PERSONNEL	15	7
By teacher	15	7
By principal	2	0
By reading teacher	1	1
By speech therapist	2	0
By staff psychologist	3	1
From a previous program	1	0
By guidance person	1	1
REFERRALS FROM OUTSIDE SCHOOL	6	1
By probation officer	1	0
By welfare worker	1	0
By social work agency	1	1
By psychiatrist	0	0
By employment service	0	1
By physician	0	1
DIAGNOSTIC TESTING	1	6
Reading	0	2
Intelligence	1	0
Achievement test used as diagnostic	0	1
ACHIEVEMENT TEST SCORES LOW	3	2
Reading test	0	2
Ability or skills test	1	0

Identification method	Number of summer projects	Number of winter projects
INTERVIEWS WITH STUDENTS	0	1
OBSERVATION OF STUDENTS	1	1
PAST RECORD	1	1
ANECDOTAL RECORDS	1	0

NOTE: Response categories which subsume other responses may not equal the sum of responses to the sub-categories because a project representing more than one sub-category was counted only once for the category. Furthermore, there were some responses indicating a main category without specifying the sub-category.

DATA SUMMARY

Evaluation designs used* (projects from which data were available = 37 out of 43).

Type of Design	Summer projects	Winter projects	Totals**
0 X 0	12 (plus part of one project)	5 (plus part of one project)	17+
No evaluation design	8	8	16
0 X 0 X 0 X 0 (Repeated observations within one year)	1	2	3
0 X 0 (Pre-test, post-test with control group, 0 0)	1	0	1
X 0 (Post-test only)	1	0	1
0 X 0 X 0 X (Repeated observations year to year)	0	1	1
0 X (Pre-test only)	Part of one project	0	0+

* See footnote on page 168 for explanation of code representation of design type.

** This column does not total 37 since some projects employed a combination of designs and are therefore represented more than once.

For discussion, please see page 170.

DATA SUMMARY

Number and percentage of projects in the sample which included comparison as well as treatment groups (N = 38 out of 43).

Item under consideration	Number of projects	Percentage of projects exclusive of those for which adequate data were not available	Number of projects for which data were not available	Number of projects for which these items are inapplicable
	S and W*	S and W	S and W	S and W
No, did not include comparison group	37	97%	5	0
Yes, did include comparison group	1	3%	5	0

* S and W = Summer and winter projects

Please see page 171 for discussion.

DATA SUMMARY

Standardized tests used in project evaluations (projects from which data were available = 41 out of 43).

Type of test	As part of regular testing program*		Given to all students in program		Given only to some students in program	
	S	W	S	W	S	W
ACHIEVEMENT BATTERIES	4	7	6	3	3	2
Stanford Achievement	1	2	1	1	1	0
SRA Achievement Series	0	3	1	2	0	0
Iowa Tests of Educational Development (gr. 9+)	0	1	0	0	0	0
Iowa Test of Basic Skills (gr. 3-9)	0	2	1	0	0	0
California Achievement Tests	1	0	1	0	0	1
Metropolitan Achievement Tests	2	0	1	0	1	1
Unidentified	1	0	1	0	0	0
MATHEMATICS ACHIEVEMENT TESTS	0	0	0	0	1	0
Lankton First Year Algebra Test	0	0	0	0	1	0
Schorling Arithmetic	0	0	0	0	1	0
Snader General Mathematics Test	0	0	0	0	1	0
SPELLING TESTS	0	0	0	1	0	0
Morrison-McCall Spelling Test	0	0	0	1	0	0
READING ACHIEVEMENT TESTS	0	2	3	1	0	0
Iowa Silent Reading Tests	0	0	0	1	0	0

* Though tests may have been given as part of a given school's testing program, this does not necessarily mean that data were used in Title I project evaluation.

Type of test	As part of regular testing program		Given to all students in program		Given only to some students in program	
	S	W	S	W	S	W
Nelson Reading Test	0	1	0	0	0	0
California Reading Tests (sub-test of CAT)	0	1	0	0	0	0
Stanford Reading Tests (sub-test of SAT)	0	0	2	0	0	0
Houghton-Mifflin Reading Program Tests	0	0	1	0	0	0
Gates-MacGintie Reading Tests	0	0	1	0	0	0
DIAGNOSTIC READING TESTS	0	1	4	2	0	4
Diagnostic Reading Scales (George Sprache)	0	0	0	1	0	1
Lyons and Carnahan New Developmental Reading Test	0	1	0	0	0	0
Gates-McKillop Reading Diagnostic Tests	0	0	1	0	0	2
Cooper Diagnostic Reading Test	0	0	1	0	0	0
Total Comprehension Test	0	0	1	0	0	0
McCullough Word Analysis Tests	0	0	0	1	0	0
Dolch Sight Word Test	0	0	1	0	0	0
Durrell Analysis of Reading Difficulties	0	0	0	0	0	1
ORAL READING TESTS	0	0	0	3	0	1
Gray Oral Reading Tests	0	0	0	2	0	1
Gilmore Oral Reading Test	0	0	0	1	0	0
READING READINESS TESTS	0	4	0	3	0	2
American School Reading Readiness Test	0	0	0	1	0	1
Metropolitan Reading Readiness	0	4	0	1	0	0

Type of test	As part of regular testing program		Given to all students in program		Given only to some students in program	
	S	W	S	W	S	W
Maturity Level for School Entrance and Reading Readiness	0	0	0	1	0	0
The Pre-Reader	0	0	0	0	0	1
MISCELLANEOUS READING TESTS	0	0	1	0	0	1
Botel Reading Inventory	0	0	1	0	0	0
Durrell-Sullivan Reading Capacity	0	0	0	0	0	1
GROUP INTELLIGENCE TESTS	2	3	2	1	2	4
Goodenough Draw-a-Person Test	0	0	0	0	1	3
Otis Lennon	0	0	0	0	1	0
Pintner-Durost Test of General Ability	0	1	0	0	0	0
Kuhlman-Anderson	1	0	0	0	0	0
Otis Gamma	0	0	0	0	1	0
Lorge-Thorndike Intelligence Test	2	2	2	0	1	0
Pintner-Cunningham Primary Test	0	1	0	0	0	0
California Test of Mental Maturity	0	1	0	0	0	0
Otis Quick-scoring Test of Mental Ability	0	0	0	1	0	0
IPAT Culture-Fair Intelligence Test	0	0	0	0	0	1
INDIVIDUAL INTELLIGENCE	1	0	0	1	1	5
Peabody Picture VocabularyTest	0	0	0	1	0	1
Slosson's Quick-Scoring IQ Test	1	0	0	0	0	0
Stanford Binet	0	0	0	0	0	3
Wechsler Intelligence Scale for Children	0	0	0	1	1	3

Type of test	As part of regular testing program		Given to all students in program		Given only to some students in program	
	S	W	S	W	S	W
PERCEPTION	0	1	0	1	0	3
Berea-Gestalt Form Test	0	0	0	0	0	1
Frostig Test of Visual Perception	0	1	0	0	0	1
Bender Gestalt	0	1	0	1	0	2
Wepman Auditory	0	1	0	0	0	1
Slingerland	0	0	0	0	0	1
MOTOR PROFICIENCY	0	0	0	0	0	1
Purdue Motor Survey	0	0	0	0	0	1
CHARACTER--PROJECTIVE	0	0	0	0	0	1
Thematic Apperception Test	0	0	0	0	0	1
CHARACTER--NONPROJECTIVE (other than behavioral development scales)	0	0	1	0	1	1
California Test of Personality	0	0	0	0	0	1
Social and Emotional Behavior Test	0	0	1	0	0	0
Demos-D	0	0	0	0	1	0
BEHAVIORAL DEVELOPMENT SCALES	0	0	0	2	0	0
Vineland Social Maturity Scale	0	0	0	1	0	0
Developmental Behavior Test of Ilg and Ames	0	0	0	1	0	0
Cain-Levine Social Competency Scale	0	0	0	1	0	0

Type of test	As part of regular testing program		Given to all students in program		Given only to some students in program	
	S	W	S	W	S	W
CLASSROOM OBSERVATION PROTOCOLS	0	0	0	0	1	0
Garfunkel's CRB Scale	0	0	0	0	1	0
VOCATIONAL PREFERENCE TESTS	0	1	0	0	0	0
Kuder Preference Test	0	1	0	0	0	0
TEST OF TEACHER ATTITUDES	0	0	1	0	0	0
Minnesota Teacher Attitude Inventory	0	0	1	0	0	0
STUDENT ATTITUDE QUESTIONNAIRES	0	0	1	0	0	0
SRA Attitude Questionnaire	0	0	1	0	0	0

(For discussion, please see page 175.)

NOTE: Response categories which subsume other responses may not equal the sum of responses to the sub-categories because a project representing more than one sub-category was counted only once for the category. Furthermore, there were some responses indicating a main category without specifying the sub-category.

DATA SUMMARY

Statistical treatments used by projects in analyzing project data (N = 36 out of 43).

Statistical Treatment	Number of projects from which data were available	Percentage of projects exclusive of those from which data were not available
	S and W*	S and W
None (includes responses of no data)	22	61%
Computed gain scores in terms of grade equivalencies	10	27%
Sample graphs plotted, etc. (but no real analysis)	3	8%
Co-variate analysis for comparison with control group (Boston)	1	4%

* S and W = Summer and winter projects

Please see page 183 for discussion.

DATA SUMMARY

Feedback mechanism for program modification (N = 43).

Item under consideration	Number of projects from which data were available	Percentage of projects exclusive of those from which data were not available
	S and W*	S and W
No feedback mechanism	20	47%
Staff meetings, but practically no discussion on feedback for program modification	4	9%
Informal feedback (discussion and/or conversation)	5	12%
Weekly or regular staff meetings	14	32%
TOTALS	43	100%

* S and W = Summer and winter projects

See page 194 for discussion.

DATA SUMMARY

Background, training, and utilization of teacher aides.

Characteristic	Number of projects with characteristics as outlined		Percentage of projects in sample exclusive of those from which data were not available or applicable
	S*	W**	S and W
BACKGROUND			
Some college education	0	1	6%
College students	6	0	33%
High School students	2	0	11%
Housewives	2	3	28%
Neighborhood of school	5	1	33%
(Above categories are not mutually exclusive)			(N = 18)
DUTIES			
Clerical	6	2	41%
Housekeeping	2	2	22%
Assisting with instruction	9	4	76%
(Above categories are not mutually exclusive)			(N = 18)
TRAINING			
None	3	4	47%
Pre-service for this project	2	3	33%
College or university connected training	3	0	20%
			(N = 15)

* S = Summer projects
**W = Winter projects

See page 209 for discussion.

DATA SUMMARY

Number and percentage of projects which placed some emphasis on teaching the following processes of learning. (N = 28; 17S and 11W)

Aspect of learning process being considered	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Recall	16	11	94.0%	100%	8	6	0	1
Comprehension	13	7	76.5%	63.5%	8	6	0	1
Application	6	7	35.0%	63.5%	8	6	0	1
Analysis	5	5	29.5%	45.5%	8	6	0	1
Synthesis	6	5	35.0%	45.5%	8	6	0	1
Evaluation	4	2	23.5%	18.0%	8	6	0	1
Convergent thinking	4	2	23.5%	18.0%	8	6	0	1
Divergent thinking	3	2	17.5%	18.0%	8	6	0	1

* S = Summer project
** W = Winter project

For discussion, please see page 221.

DATA SUMMARY

Number and percentage of projects which have aspects of their programs which focus on developing the capacities listed. (N = 33; 19S and 14W)

Capacity or skill	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Listening	12	8	63.0%	57.0%	6	4	0	0
Observing	11	6	58.0%	43.0%	6	4	0	0
Recording	5	3	26.0%	21.5%	6	4	0	0
Attending behavior	4	6	21.0%	43.0%	6	4	0	0
Test taking	6	4	31.5%	28.5%	6	4	0	0
Following directions	10	5	53.0%	36.0%	6	4	0	0
Study habits	5	5	26.0%	36.0%	6	4	0	0
Visual discrimination	5	6	26.0%	43.0%	6	4	0	0
Auditory discrimination	9	6	47.0%	43.0%	6	4	0	0
Vocabulary & word reasoning	12	7	63.0%	50.0%	6	4	0	0
Speech	8	8	42.0%	57.0%	6	4	0	0
Information seeking behavior	3	1	16.0%	7.1%	6	4	0	0
Problem solving	2	0	10.5%	0%	6	4	0	0
Participation in social group	1	1	5.3%	7.1%	6	4	0	0

* S = Summer project
** W = Winter project

For discussion, please see page 222.

DATA SUMMARY

Number and percentage of projects which made deliberate efforts to include the program characteristics listed. (N = 40; 24S and 16W)

Program characteristics	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Individualized prescriptions for learning were made	9	9	37.5%	56%	1	1	0	1
Program identified weaknesses and/or strengths of student so that program content could be geared to either or both	10	5	42%	31%	1	1	0	1
Special consideration was given to interests of children in determining learning activities	5	4	21%	25%	1	1	0	1

* S = Summer project
** W = Winter project

For discussion, please see page 226.

DATA SUMMARY

Number and percentage of projects which used materials with, or made verbal or nonverbal references to, racial and ethnic minorities as itemized. (N = 31)

Item under consideration	Number of projects	Percentage of projects exclusive of those for which adequate data were not available	Number of projects for which data were not available	Number of projects for which these items are inapplicable
Program lacked any significant favorable reference to ethnic minorities	23	74%	10	2
Some inclusion of favorable materials in books, such as illustrations	5	16%	10	2
Pictures on wall depicting persons from different racial backgrounds	1	3.2%	10	2
Teachers were from minority group	1	3.2%	10	2
Course actually focused on history or culture of ethnic minority	2	6.5%	10	2

For discussion, please see page 230.

DATA SUMMARY

Number and percentage of projects dealing with subject matter content in ways specified below. (N = 32; 20S and 12W)

Presentation mode	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Use of short sequential steps	18	11	90%	55%	5	5	0	1
Provided for continuous and immediate success experience	12	11	60%	55%	5	5	0	1
Evaluated child after each step to determine readiness for next step	8	10	40%	50%	5	5	0	1
Used saturation approach (repetition, summarization, connecting links, alternative ways of explaining, etc.)	7	8	35%	40%	5	5	0	1

* S = Summer project
** W = Winter project

For discussion, please see page 231.

DATA SUMMARY

Number and percentage of projects in sample in which the curriculum was deliberately planned so that it would be consistent with the listed aspects of a child's background. (N = 34; 20S and 14W).

Item under consideration	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Environment	6	5	30%	36%	5	4	0	0
Experiences	6	6	30%	43%	5	4	0	0
Abilities	16	9	80%	64%	5	4	0	0
Interests	11	6	55%	43%	5	4	0	0

* S = Summer project
** W = Winter project

For discussion, please see page 229.

DATA SUMMARY

Number and percentage of projects in which efforts were made to include the listed program characteristics related to motivating students. (N = 33; 19S and 14W)

Program characteristics	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Capitalizing on student interest	13	12	68.5%	79%	6	4	0	0
Use of reward and punishment in ways to increase motivation	6	11	31.5%	79%	6	4	0	0
Considered competence motivation as important factor in teaching methodology	5	6	26%	43%	6	4	0	0

* S = Summer project
** W = Winter project

For discussion, please see page 233.

DATA SUMMARY

Number and percentage of projects which made attempts to analyze students' self-concepts and considered particular aspects of the program as instrumental in improving self-concept. (N = 34; 19S and 15W)

Program characteristics	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Attempts were made to analyze students' self-concepts	3	6	16%	40%	6	3	0	0
Particular aspects of program were identified as those specially important in improving self-concept	8	5	42%	33%	6	3	0	0

* S = Summer project
** W = Winter project

For discussion, please see page 233.

DATA SUMMARY

Number and percentage of projects making specific and systematic use of role models to assist students in learning. (N = 36; 21S and 15W)

Item under consideration	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Use of role models	5	2	24%	13.5%	4	3	0	0

* S = Summer project
** W = Winter project

For discussion, please see page 235.

DATA SUMMARY

Number and percentage of projects employing the following means of enhancing learning. (N = 37; 22S and 15W)

Item under consideration	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Games	14	6	64%	40%	3	2	0	1
Dramatics	4	2	18%	13.5%	3	2	0	1
Role playing	4	1	18%	6.5%	3	2	0	1
Students as teachers of peers	7	1	32%	6.5%	3	2	0	1
Multi-media presentations	4	1	18%	6.5%	3	2	0	1
None of the above	4	6	18%	40%	3	2	0	1

* S = Summer project
** W = Winter project

For discussion, please see page 235.

DATA SUMMARY

Number and percentage of projects using special instructional materials. (N = 36)

Special materials	Number of projects	Percentage of projects exclusive of those for which adequate data were not available	Number of projects for which data were not available	Number of projects for which these items are inapplicable
Available	33	91%	3	3
Utilized or rarely utilized	1	3%	3	3
Locally developed	8	22%	3	3

For discussion, please see page 236.

DATA SUMMARY

Number and percentage of projects using equipment for making special instructional materials. (N = 36; 22S and 14W)

Special materials	Number of projects		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
Available	21	12	95.5%	86.0%	3	1	0	3
Utilized or rarely utilized	0	2	0%	14.0%	3	1	0	3
Locally developed	6	3	27.0%	21.5%	3	1	0	3

* S = Summer project
** W = Winter project

For discussion, please see page 238.

DATA SUMMARY

Number and percentage of projects which have classes restricted to the sizes listed.
(N = 37; 21S and 16W)

Class size	Number of projects***		Percentage of projects exclusive of those for which adequate data were not available		Number of projects for which data were not available		Number of projects for which these items are inapplicable	
	S*	W**	S	W	S	W	S	W
1 - 3	7	6	33%	37.5%	4	2	0	1
4 - 6	6	6	28.5%	37.5%	4	2	0	1
7 - 9	9	8	43%	50%	4	2	0	1
10 - 13	11	5	52.5%	31%	4	2	0	1
14 - 20	5	5	24%	31%	4	2	0	1
Over 20	1	1	4.8%	6.3%	4	2	0	1

* S = Summer project
** W = Winter project
*** Many projects have several components each of which may have classes of different sizes. Thus the same projet may use both very small and very large classes depending on the activity or need.

For discussion, please see page 237.

DATA SUMMARY

Contributions from parents to the projects (projects from which data were available = 39 out of 43).

Type of service	Summer projects	Winter projects	Total
No involvement of parents in working with project	16	10	26
Volunteer work with project	2	1	3
Teacher aides	1	2	3
Assistance on field trips	3	0	3
Parents offered their services	2	0	2
Function as member of advisory group	1	0	1
Parents utilize information related to studies for home use with their children	1	0	1

For discussion, please see page 242.

DATA SUMMARY

Services offered to parents by projects (projects from which data were available = 31 out of 43).

Type of service	Summer projects	Winter projects	Total
Open house for parents	7	0	7
No services	5	1	6
Parent group discussions	3	3	6
Home visits	3	1	4
Parent-teacher conferences	1	2	3
Parent-teacher-counselor conferences	0	1	1
Test interpretation for parents	0	1	1
Tutor-parent conferences	0	1	1
Counseling for parents	1	0	1
Progress reports to parents	1	0	1

For discussion, please see page 242.

DATA SUMMARY

Community involvement (projects from which data were available = 33 out of 43).

Type of involvement	Summer projects	Winter projects	Total
No involvement	13	6	19
Use of local service agencies	4	2	6
Use of community volunteer groups or individuals	3	0	3
CAP agency	1	2	3
Cooperation with Headstart	1	1	2
Take advantage of community cultural offerings	1	1	2
Use of local college resources	0	1	1
Massachusetts Association for Students with Learning Disabilities	0	1	1
Local library	1	0	1
School board allocating monies for one-half of project	0	1	1

See page 244 for discussion.

APPENDIX VII

Note on Limitations of the Data

Because of the time of the year the study began, there was no way for us to be in on the planning of projects in the sample. This precluded the possibility of making arrangements in advance for collecting specific kinds of data. Since the study was originally conceived as a three-year endeavor, it was our hope to become involved in the planning of selected projects during the second year in ways that would support the collection and analysis of more reliable data. This would have permitted the kind of detailed evaluation that would have evolved into an identification of the most successful and least successful aspects of the projects.

In reviewing what a real evaluator should do, Henry Dyer states that he "should try, within the constraints imposed by circumstances, to work out in advance some sorts of experimental designs that will make possible analyses of the data that will minimize the inevitable ultimate wrangles over what the results mean and provide a reasonable if not a rigorous basis for deciding on what projects should be continued, beefed up, or abandoned."[1] Because there was no advance time for planning data collection before projects began, our data on several of the projects were incomplete. This meant that we could not avoid some of those "inevitable ultimate wrangles over what the results mean," nor could we feel justified in always generalizing from the sample, though randomly selected, to all Title I projects in the State as a whole. Also, in some cases objectivity of observations may be doubtful, since it was not always possible for two or more observers to visit a given project.

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[1] Dyer, Henry S., "Evaluating Educational Programs," The Urban Review, vol. 3, no. 4, February, 1969, p. 11.

However, our analyses have resulted in conclusions which parallel the results of other similar studies and we are reasonably confident in their validity in spite of the above mentioned limitations.

APPENDIX VIII

Department of Education and Its Title I Office

Within the Massachusetts Department of Education, the administration of the E.S.E.A. Title I program is conducted through the Bureau of Elementary and Secondary Education--one of seven bureaus within the Division of Curriculum and Instruction. Some explanation of the organization of the bureau and of the Title I staff within the bureau is important in order to give an accurate perspective on the state-level management of the Title I program. The Bureau of Elementary and Secondary Education includes over fifty full-time professional educators. These people serve as "supervisors" in various fields including such areas as Art; Reading; Elementary Education; Secondary Education; Guidance, Counseling and Testing; Music; History; Health, Physical, and Safety Education; and Driver Education. In general, the state supervisors are available to assist local school districts in interpreting and implementing state policies and programs, to help them develop local programs and curricula, to coordinate pertinent activities in their subject areas at the state level, and to act as resources on current developments throughout the state. Within this bureau, there are presently four staff members assigned to the area of Compensatory Services. Because in Massachusetts most of the compensatory education programs supervised through the Bureau of Elementary and Secondary Education are those funded under Title I, it is these four people who constitute the professional core of what is unofficially termed the state's Title I Office.

Actually, several federal programs in compensatory education are administered through this office. In addition to the Program for Children in Low-Income Areas of Local Education Agencies (P.L. 89-10), the staff supervises three other facets of the total Title I program--the Program for Children of Migratory Workers, the Program for Children in State Institutions for Neglected and Delinquent Children, and the allocations for children in other institutions for the neglected and delinquent--all of which are the result of an amendment (P.L. 89-750) to the original E.S.E.A. Title I legislation.[1] The staff is also responsible for state management of the Bilingual Education Act (Title VII, E.S.E.A., as amended), the N.D.E.A. Student Loan Cancellation Program for teachers in low-income areas, the Follow Through Program, and for providing state technical assistance to the Headstart Program.

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[1] The Program for Children in State Schools for Handicapped Children, still another amendment designated as P.L. 89-313, is operated by the Bureau of Special Education.

The full-time staff with immediate responsibility for the operation of these programs is headed by the Massachusetts Project Director of Title I, E.S.E.A., and includes three other Supervisors of Compensatory Services. Supporting personnel includes the equivalent of two secretaries from the Bureau's secretarial pool and one fiscal auditor, although there were three auditors during the 1968-69 school year. The Bureau also contracts for additional services for the Title I Office. Various consultants are hired to conduct Title I-related workshops for local schoolmen, and one is retained for an average of six days a month to assist in evaluation activities and in the completion of reports and surveys. In addition, other members of the Bureau are called upon from time to time to help the Title I staff with the review of project applications and to work with local project planners in designing the content of individual projects.

This outline of staffing reflects the pattern that has emerged in the course of the 1968-69 year. Prior to that time, except for a six-month period during 1967 when there were four on the staff, there were only two full-time professionals supervising Title I and other compensatory education activities. A third person joined the staff in the fall of 1968 and a fourth during the winter of 1969. Other supervisory positions had been budgeted but had remained unfilled. In part this has been because of the difficulty in securing competent personnel at the salaries the Department offers, and in part it is because of the lack of an effective recruitment program for the Department of Education. Although in previous years some use was made of outside consultants, last year was the first year that the office secured additional assistance in data collection, evaluation, and report preparation on a sustained, although still limited basis.

State administration of all Title I activities and other federal compensatory education programs is supported by federal funds. Up to one percent (1%) of the annual Title I allocation to Massachusetts under P.L. 89-10 can be used to obtain staff, services, and materials that the state may require to implement and evaluate its Title I program within the state. For Massachusetts, this amounts to over $150,000 yearly. Separate funds are available through other compensatory education programs (P.L. 89-750 and Follow Through) for materials and services to support state administration, but these funds cannot be used for the salaries of personnel within the Department of Education itself.

Because the Title I Program for Children in Low-Income Areas of Local Educational Agencies (P.L. 89-10) is largest, bringing over $15,000,000 into Massachusetts communities for the operation of over 400 separate projects, the staff in Compensatory Services necessarily devotes most of its time to the operation of this program. Each member acts as the liaison for a certain group of communities, reviewing their project proposals and budgets, providing advice on project design, and following up on approved projects during their operation with conferences and occasional site visits. Frequently conferences are at the four Department of Education regional offices located in Pittsfield, Worcester, North Andover, and Wareham so that the supervisors can meet with project directors from several communities in one day.

Emphasis in the Title I Office has been more upon programmatic and administrative aspects of project design than upon evaluation. There is no full-time staff member with specific responsibility for or particular training in research, evaluation, or measurement. The presence of plans for project evaluation is required in project proposals if they are to be approved, but there has not been a systematic procedure for reviewing the specifics of the evaluation designs. All projects are required to submit an annual report according to a common format designed in the Title I Office. Although previously these had been termed "evaluation reports," they collected data of a more descriptive rather than evaluative nature. Project directors were asked to provide results of standardized testing and to offer what additional information they had upon the effectiveness of their programs. The FY69 report form was simply termed a "final report" and project directors were asked to submit copies of evaluations that had been done on their Title I activities. Because final reports of previous years' projects--particularly in the case of school year projects that wait until testing results are scored before submitting final reports--are sometimes not complete by the time school districts wish approval of the next year's projects, they are not always available at the time of project review. (During FY69 the due date for final reports was moved up to June 30th for school year projects and August 31st for summer projects. This has brought in some reports that might not have otherwise been submitted prior to the re-submission of the project proposal.

The Office is attempting to strengthen its role in providing direction to local school districts in the area of evaluation. It has stated that policy for FY71 projects will include the presentation of evidence of evaluation and explanation of how the evaluation has contributed to modifications in successive projects. In order to assist local project staff members in designing and implementing useful evaluation plans, the Office has begun a series of workshops on various aspects of project assessment. These workshops started in November, 1969, and will continue throughout the year so that those involved in school year and summer projects will have an opportunity to attend.

While workshops can provide some practical answers to specific questions, they cannot make "evaluators" out of schoolmen who have had no other training in the field. Title I supervisors are therefore urging that local school districts devote some Title I in-service training time to evaluation and that they identify at least one person to work on Title I evaluation, and, if that person needs additional training, to permit him to take appropriate courses.

Project planners are also being urged strongly to obtain the assistance of an outside consultant in evaluation. The Massachusetts Advisory Council on Education has gathered a preliminary list of university people throughout the state who are expert in evaluation and interested in working with Title I projects. This directory has been circulated to superintendents and Title I directors.

APPENDIX IX

Survey Data Summaries

SURVEY DATA SUMMARY

Assistance received from a college or university (N = 173)	Number of districts	Percentage
Diagnosing needs	13	7.5%
Selecting population to be served	6	3.5%
Program planning	16	9.2%
Evaluation	18	10.4%
Curriculum development	10	5.8%
In-service training	25	14.5%
Pre-service training	15	8.7%
Budget determination	2	1.2%
Other	6	3.5%

SURVEY DATA SUMMARY

Weakness Stated (N = 173)	Number of districts listing item first	Number of districts listing item second	Total
1. Inadequate funding--lack of growth in size and scope of services due to limited funding	30	21	51
2. Inadequate follow-through--summer too short a time--should carry through school year or be within school year program	12	9	21
3. Student-teacher ratio too high to meet individual needs and problems of population served	2	3	5
4. Too few children served--should effectively accommodate more children	17	8	25
5. Non-availability of competent teachers--insufficient training of teachers	6	6	12
6. Lack of adequate evaluation procedure	16	6	22
7. Lateness of receiving grant hinders best planning and staff acquisition	7	5	12
8. Lack of specialists (general)--staff limitations	6	4	10
9. Funding uncertainty prevents innovation, planning, and staff security	5	4	9
10. Space (physical facilities, classrooms) inadequate	5	10	15

Weakness Stated	Number of districts listing item first	Number of districts listing item second	Total
11. Should cover more grades and/or subject areas	3	3	6
12. Lack of staff, parent, and/or student realization of need and value of program--indifference or apathy	5	12	17
13. Paperwork, inadequate consultation, and indecision of Boston office--application procedures too complicated	3	2	5
14. Project is forsaking real innovation for things the system should be doing anyhow	4	3	7
15. Should be a daily program	0	1	1
16. Pre-service, in-service training, orientations, teacher meetings	5	5	10
17. Responses other than above	18	20	38
18. No weaknesses	3	4	7
19. No response given	26	47	73

SURVEY DATA SUMMARY

Strength Stated (N = 173)	Number of districts listing item first	Number of districts listing item second	Total
1. Individual and small group teaching	40	17	57
2. Qualified, dedicated, cooperative staff	20	16	36
3. Provides cultural enrichment and additional services and programs not possible with local funding	10	9	19
4. Student reading problems are being noticeably improved	7	5	12
5. Change in student attitude, self-image, interest, etc.	15	11	26
6. Quality and variety of materials and A-V equipment available	1	7	8
7. Community acceptance, awareness, involvement	6	12	18
8. Improvement of professional acumen (particularly in area of disadvantaged students) on part of the faculty	6	9	15
9. Specific contribution of an outstanding teacher, counselor	2	1	3
10. Cooperation of school department on funding	0	1	1
11. Reading readiness more extensive--improved reading program	2	1	3

Strength Stated	Number of districts listing item first	Number of districts listing item second	Total
12. Specific contribution of an outstanding project component	2	4	6
13. Additional instruction beyond regular school year	0	5	5
14. Better chance provided in early grades	4	2	6
15. Sufficient funds for children served	1	2	3
16. Teacher in-service training program, other training for project teachers	0	3	3
17. College and university consulting services	1	0	1
18. Assistance of teacher aides	1	4	5
19. Informal atmosphere	0	3	3
20. Flexibility of guidelines permits innovation, progressive administration	4	6	10
21. System-wide spill over of project discoveries to regular school instruction (some lasting system-wide change)	1	2	3

SURVEY DATA SUMMARY

State Department assistance stated (excluding heavier funding) (N = 173)	Number of districts listing item first	Number of districts listing item second	Number of districts listing item third	Total
1. No assistance needed	21	2	2	25
2. Newsletter, inter-district communication, and/or workshops relating successful programs, methods, and techniques to staff of other programs	20	1	0	21
3. Site visits by State Department to improve their judgments and recommendations	3	2	0	5
4. Assistance in evaluation of program effectiveness (curriculum, reading, etc.)	12	11	0	23
5. Availability of school psychologist or consultant for diagnostic services, testing, and interpretation by experts	4	1	0	5
6. Consultation and in-service training	11	3	0	14
7. We are getting satisfactory or excellent assistance	9	0	0	9
8. Earlier approval on funding (in order to have time to plan and acquire adequate staff)	7	1	0	8
9. Teacher aides or trainees at all levels during school year and summer	5	0	0	5

State Department assistance stated (excluding heavier funding)	Number of districts listing item first	Number of districts listing item second	Number of districts listing item third	Total
10. State Department's lack of sufficient personnel for effective and immediate consultation (help in program planning and general assistance)	11	2	0	13
11. Revision of guidelines for greater flexibility in project size and services offered	4	0	0	4
12. Responses other than above	20	13	2	35
13. No response given	46	137	169	352

SURVEY DATA SUMMARY

University or college assistance stated (N = 173)	Number of districts listing item first	Number of districts listing item second	Number of districts listing item third	Total
1. Consultation on research procedures or evaluation procedures applicable to program areas	25	9	1	35
2. Specific teacher training or in-service training in general program areas	14	4	3	21
3. Specific teacher training or in-service training in:				
Working with disadvantaged students	8	3	0	11
Working toward model projects	2	0	0	2
Reading	3	0	0	3
Self-image	0	2	0	2
Media	1	0	0	1
Sociology and psychology of disadvantaged	3	0	0	3
4. No assistance needed (no more)	15	1	1	17
5. Colleges and universities should come to us for teacher training of students (use our program for training)	3	4	0	7
6. Should share ideas and techniques (e.g., on reading) by means of newsletter or other communication	7	3	0	10

University or college assistance stated	Number of districts listing item first	Number of districts listing item second	Number of districts listing item third	Total
7. Arrange volunteer students for tutorial assistance or teacher aides to program through academic year	6	2	1	9
8. Provide professional help or consultation	9	2	2	13
9. Provide curriculum expertise	1	2	1	4
10. What assistance and/or materials are available?	3	0	0	3
11. Computer use in compiling data	0	1	0	1
12. Development of a resource center	4	0	0	4
13. Information on research findings applicable to programs	6	1	0	7
14. We are getting satisfactory or excellent assistance	7	1	0	8
15. Addition of research components to projects	0	1	0	1
16. Program planning	5	4	0	9
17. Responses other than above	3	5	3	11
18. No response given	48	128	161	337

SURVEY DATA SUMMARY

Frequency of Compensatory Education Projects Falling Into Categories Listed:
(N = 302)

- Reading - 28
  - Remedial reading - 25
  - Developmental - 1
  - Reading readiness - 1
- Language arts - 7
  - English language arts - 2
  - English for non-English speaking - 13
  - Language arts - remedial reading - 11
  - Speech therapy - 1
- Instructional Services - 6
  - Additional staff - 1
  - Small group instruction - 6
  - Teacher aides - 11
  - Tutoring - 8
  - Individualized instruction - 3
- General remedial - 7
  - Summer school (if more than one major activity mentioned) - 32
  - Drop-outs - 1
- Vocational - 4
  - Business and office - 2
  - Industrial arts - 1
  - Work-study - 8
- Special classes - 10
  - Mentally retarded - 8
  - Emotionally disturbed - 1
  - Hard of hearing - 1
- School readiness - 8
  - Pre-school - 17
  - Pre-kindergarten - 3
  - Kindergarten - 1
- Guidance and psychological services - 7
  - Testing - 1
  - Diagnosis - 2
  - Psychological - 1
  - Home - school - 2
  - Guidance and counseling - 2
- Non-academic activity - 1
  - Cultural enrichment - 3
- In-service training - 1
- Academic instruction
  - Two or more subjects - 34
  - Mathematics - 2
  - Science - 3
  - Social studies - 1
  - Curriculum development - 4
- Other - 15
- No response - 1

NOTE: Categories modified from NEEDS-NESDEC Title I study--only categories with at least one reported response are listed. Each project was coded in only one category by the dominant activity. The most specific category possible was used in instances of narrative responses.

SURVEY DATA SUMMARY

Source of Project Funding
(N = 302)

Source Stated	Number of Projects	Percentage
Title I	230	76.2
Title II	2	.7
Title III	7	2.3
Title IV	11	3.6
Vocational Education Act	6	2.0
Headstart	5	1.7
Title I, II, and local	1	.3
Title I and local	26	8.7
Local only	6	2.0
Other federal sources	1	.3
Title III and local	1	.3
Local and State funds	3	1.0
O.E.O. and Title I	2	.7
Title I and Title VI	1	.3

SURVEY DATA SUMMARY

Number of Grades Included in Project
(N = 279)

Number of Grades	Number of Projects	Percentage
0	2	.7
1	36	12.9
2	21	7.5
3	37	13.3
4	29	10.4
5	20	7.2
6	65	23.3
7	22	7.9
8	31	11.1
9	7	2.5
10	5	1.8
11	4	1.4

Number of Children Served Per Project
(N = 302)

Number of Children Being Served	Number of Projects
2 - 49	96
50 - 99	74
100 - 149	31
150 - 199	30
200 - 249	10
250 - 299	8
300 - 349	11
350 - 399	5
400 - 449	1
450 - 499	4
500 - 549	3
550 - 599	2
600 - 649	3
650 - 699	2
700 - 799	3
800 - 899	2
900 - 999	2
1000 and over	14

SURVEY DATA SUMMARY

Project Evaluation Description*
(N = 302)

Item	Number of Projects	Percentage
Pre-test, post-test	218	72.2%
Use of control groups	40	13.2%
Operations data (budget, facilities, time, etc.)	125	41.4%
Opinionnaire	126	41.7%
Teacher observations	273	90.4%
Standardized test program	187	61.9%
Descriptive report to sponsoring agency	189	62.6%
No evaluation	6	2.0%
Other	41	13.6%

* Projects indicating positive response in each category

Person Assigned to Project Specifically for Evaluation Purposes: Time Given To Evaluation Tasks As Percentage (N = 302)

Percentage of time	Number of Projects
0 - 4	13
5 - 9	23
10 - 14	23
15 - 19	4
20 - 24	13
25 - 29	17
30 - 34	10
35 - 39	0
40 - 44	1
45 - 50	0
50 - 54	18
60 - 64	1
74 - 79	2
95 - 99	1
100	12
No Response**	164

** No response includes those who did not assign an evaluator

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